

F I N A L

SETTLEMENT REPORT ON THE REVISION

OF THE

JALAUN DISTRICT.

BY

H. C. R. HAILEY, Esq., C.S., Settlement Officer.



A L L A H A B A D :

Printed at the United Provinces Government Press,

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FROM

R. W. GILLAN, Esq., I.C.S.,

SECRETARY TO THE BOARD OF REVENUE,

UNITED PROVINCES,

TO

THE CHIEF SECRETARY TO GOVERNMENT,

UNITED PROVINCES,

REVENUE DEPARTMENT.

Dated Allahabad, the 14th July 1906

SIR,

I AM directed to submit the final report of the Jalaun settlement recently completed by Mr. Hailey. Owing to some misapprehension, the Commissioner was not supplied by the Government Press with a copy of the report, and as the Board had kept the supervision of the settlement in their own hands, they thought it unnecessary to delay matters by calling on him for a review.

Present :
THE HON'BLE MR. J. HOOPER, C.S.I.

2. The circumstances of the district are too well known to need any long description. The district consists in brief of a shallow basin of the dark soils—*mar* and *kabar*—that are familiar in Bundelkhand, surrounded by higher land and a rim of ravines along the rivers—the Jumna, Betwa and Pahuj—which nearly encircle it. To the north there is a tract of loam covering 170 square miles, closely cultivated and well populated, the characteristics of which resemble those of the *doab*, but the great bulk of the district is included either in the central plain of *mar* and *kabar* (1,010 square miles), or in the high land and ravines along the rivers (290 square miles). There are no hills, and the red soil which is found in the hilly tracts of Jhānsi is absent, but in other respects the district is a typical part of Bundelkhand. The *mar* is very fertile, but its produce is almost restricted to the rabi : its one crop, gram and wheat, is peculiarly liable to rust, and it is often thrown out of cultivation by the spread of *kans*. The *kabar* is sensitive either to excess or defect of rainfall, and the *rakar* or ravine land is a poor gritty soil incapable of continuous tillage. Irrigation is supplied by the Betwa canal : it has greatly extended in the last few years, but hitherto canal water has rarely been available for the kharif. The population is thin, the density per square mile being 242 in the central plain and 137 in the ravines. More than one-fourth of the villages are uninhabited. Hence a large part of the area is cultivated by non-resident tenants, and this partly accounts for the backward state of agriculture and the fluctuations in the cultivation. Nearly the whole district is held by peasant proprietors, chiefly thakurs and brahmans.

In the circumstances that have been summarized above the conditions of agriculture are precarious in the extreme. Writing in 1873, Mr. White, who conducted the last revision of the district settlement, said “during the past five years we have had to one good season four bad ones, and of them one has been a season of severe drought.” Mr. Hailey’s experience has not been very different: he saw five harvests of which only one was good, one was indifferent, and the rest were partial or total failures.

3. The results of these peculiar conditions are the main points that have to be considered in discussing the assessment ; but it is necessary first to allude to certain features in the previous history of the district, and to draw attention to the extreme vicissitudes which it has experienced. The district was acquired at different periods: first in 1805-06 the parganas of Kunch and Kalpi—the *kanuni* parganas as they were called, since they were included in the regulation district of Hamirpur ; and in 1839--1843 the remainder, which as a non-regulation tract was styled *partali*. Of recent years there has been no district in the provinces the revenue administration of

which has caused so much anxiety as Jalaun: and it is remarkable to find that at one time it was as notable for fertility and prosperity as now for precariousness. Sometime before 1840, Kunch was not only the garden of Bundelkhand, but it had become "a proverb to the whole of the North-West":— and the town was an emporium of trade for central India. Another great mart was Kalpi; here the East India Company had an agency for the purchase of raw cotton, buying, it is said, at one time some 40 lakhs worth a year, and the town had 52 banking houses, where a generation later there were only four bankers from whom *hundis* could be obtained. These specific instances of prosperity, it will be observed, apply to the *kanuni* parganas, and their prosperity appears to have depended on the monopoly of trade which they enjoyed at a period when they formed an outpost of British territory in the midst of native states, and when, as an officer wrote, Bundelkhand produced "the finest cotton in all Hindustan." Influenced possibly by the general prosperity of the district, the officers who knew it in its earlier days formed a high, perhaps an exaggerated, opinion of its agricultural capacity. The richness of the black cotton soil was described as amazing, and it was recorded that the harvests in Kunch were almost as secure as though the land were irrigated.

With the extension of British territory the advantage of position disappeared, and the opening up of new tracts to the cultivation of cotton deprived Bundelkhand of its pre-eminence. Lastly the development of modern trade routes altered the old conditions, and Kalpi declined as Cawnpore began to flourish. The diversion of trade injured the *kanuni* tract in particular, but the whole district was affected by the extension of cotton culture in other parts of the country and the fall in the price of this staple. The district lost the position it formerly occupied, and the economic changes in its condition inevitably affected the value of the land. While other parts of the provinces were making rapid progress, agriculture in Jalaun remained stationary or declined. The soil retained its fertility; but apparently the energy and resources of the people decreased; and it is remarkable that cane, the cultivation of which is now almost unknown, was at one time produced in considerable quantities by methods which Mr. Hailey considers to be beyond the powers of the agriculturist of the present day.

4. The decline in the prosperity of the district, a portion of which at least is now one of the most precarious tracts in the provinces, is reflected in the assessments of the land revenue at different periods. The *kanuni* pargana of Kunch at one time paid the highest revenue rate in the provinces: even in Kalpi, which, bordering on rivers and intersected by ravines, is the poorest pargana in the district, the revenue rate in 1811 of the *kanuni* portion was Rs. 2-1-11, though the pargana as now constituted will in future pay only Re. 1-1-3 per acre. The course of gradual but inevitable reductions in a high initial demand must therefore be traced in some little detail.

5. It accords with what has been said of the prosperous period of the district that the highest assessments of the *kanuni* portion were among the earliest. In 1816 Kalpi paid Rs. 1,15,334 in revenue, and in 1821 Kunch was assessed at Rs. 2,18,140. Kalpi however soon showed signs of distress: and though some reduction was given at each decennial revision, it was completely prostrated by the famines of 1830, 1834 and 1838. In Kunch it is remarkable to find that, except in two seasons of famine, the revenue was collected uniformly without arrears. The assessments of these two parganas were revised by Mr. (afterwards Sir William) Muir in 1841. In Kalpi the fullest allowance was made for deterioration, and the revenue was lowered to Rs. 65,000, to be increased gradually as cultivation revived to Rs. 78,335. In Kunch a reduction of some Rs. 19,000 was granted, Sir William Muir remarking that he had some difficulty in justifying the reduction to his superiors or even to his own mind. His assessment was paid for ten years without balance or seeming difficulty, but by 1850 the decline in the general

prosperity of this pargana began to be felt: the position was aggravated by a period of very low prices and again by a failure of the crops, and in 1860 the revenue was reduced to Rs. 1,83,522.

Regarding the early assessments of the *partali* parganas there is less information. The first summary settlement in 1840 at Rs. 4,13,839 was raised by 1851 to Rs. 6,60,886. After summary reductions of Rs. 42,016 the revenue stood at Rs. 6,18,870, when in 1863 the first regular settlement was undertaken by Major Ternan. The revenue finally assessed was Rs. 6,03,497, but the total was swollen by resumption of a very large number of revenue-free plots, and it appears that Major Ternan reduced the revenue he found on the roll from Rs. 6,18,870 to Rs. 5,31,143, or 13·5 per cent. His revenue was moderate and is said by Mr. White always to have been collected with ease.

6. The last revision both of the *kanuni* and *partali* tracts was effected by Mr. White, and the operations, though they were carried out in the *kanuni* portion in 1874, and did not extend to the *partali* portion till twelve years later, may therefore be considered together.

The main problem was how to allow for vicissitudes of season, and its importance was fully recognized by the Settlement Officer. Current rates of rent were easily ascertained, but in Jalaun these rates could not be accepted as they stood. As Mr. White wrote in his appendix to the Assessment Report of Kunch "when we have ascertained the rents at which the cultivators habitually engage, we are still far off from the point at which we may stop for assessment." The revenue had to be an average payable in good and bad years alike and there was no resource, he observed, in a tract circumstanced like Kunch but to grant, at the outset of assessing operations, a liberal deduction for contingencies; and, as the risk of crop failure varied greatly in different soils, it was impossible to fix one general rate of deduction. He determined therefore a differential scale of allowances varying from 10 per cent. in first class *mar* to 30 per cent. in the worst *rakar*, and giving for the pargana as a whole an abatement of 15 per cent. from the full ascertained rates. Rates reduced in these proportions would have given a revenue in Kunch of Rs. 1,58,000, but it was not found necessary in all cases to lower the revenue to the full extent indicated by the rates, and the detailed assessments worked out to Rs. 1,64,149. The methods adopted by Mr. White did not however meet with approval. Unsupported by statistics or other proof, they were described as arbitrary, and it was decided finally that in Kunch no reductions from full average rates were necessary. The full rates on which Mr. White was directed to assess would have given a revenue of Rs. 1,87,219: but again there were cases in which the existing demand was retained, though above the revenue pointed out by the rates and the assessment finally sanctioned was Rs. 1,93,310 giving an increase of Rs. 10,990 or 6 per cent. This assessment has had to be largely reduced. In Kalpi a new turn was given to the question of abatements. The nominal rent charged in the *jamabandi*, it was said, was the highest that could be paid in good years and was liable to adjustment on a rough valuation (*dakhā parkhī*) of the outturn of each season; any damage or loss being then estimated, so much was struck off the rent, and the tenant on paying up the remainder received a discharge in full. The existence of any such system of *chhut* or remission was denied at the time, but no exception was taken to Mr. White's contention that full rates could not be applied in Kalpi as they had been in Kunch, because Kalpi was a poor and precarious pargana, and because a large enhancement in the revenue was proposed. He was therefore allowed to make abatements from his full rates; and the Kalpi settlement, though by no means easy, is described by Mr. Hailey as having worked well, where it had a fair chance.

7. In the *partali* tract, when it came under assessment twelve years later, the system of abatement was continued, though now the differential scale for soils appears to have been dropped, and the deductions were given at percentages varying from 6½ to 12½ per cent. (one to two annas in the rupee) in lump sums on

villages. At the same time, as Mr. Hailey notes, the methods of assessment were defective. In the first place the fact that a period of deterioration had set in was not recognized, and any falling off in cultivation was put down to intentional concealment; rents were also frequently held to be fraudulent and were freely rejected. Secondly, great stress had been laid in the rules then recently published on a close adherence to actuals: and it was no doubt in his endeavours to conform to his instructions that Mr. White was led to value the assumption areas by the incidence of non-occupancy rents, though these were often paid by exceptional cultivators for only a few plots of land. In this way the abatements made by the Settlement Officer were more than counterbalanced by high valuations, and it appears that this was the case not only in the *partali* tract but in the district as a whole: the incidence of rents on holdings area was Rs. 3.48, and the incidence of revenue assessed was Re. 1.71. In the *partali* tract the result, particularly in Orai, and to a less extent in the old portion of pargana Jalaun, was serious over-assessment. In the three remaining parganas of Kunch, Kalpi (*partali* portions) and Madhogarh the mistakes of the earlier assessments were to a large extent rectified and the revenue was not generally excessive.

8. The statement given by Mr. Hailey in paragraph 10 of his report shows that even before Mr. White's assessment was concluded, the district was entering on a period of depression which lasted almost till the time for revision again came round. In 1884-85 the cultivated area was 596,799 acres. Subsequent years show a gradual decline till (apart from the famine year of 1896-97) in 1899-1900 the lowest point was reached in a cultivated area of 499,284 acres. No settlement that reserved to Government a reasonable share of the normal profits could have stood the strain of deterioration so continued, and the assessment of Jalaun soon led to serious difficulties. Considerable arrears of revenue accrued, the district was described as being in a "condition of progressive decay," and in several villages attached for arrears of revenue the total rents did not amount to the revenue and cesses. At last in 1892 a revision was undertaken by Mr. Steel in villages where the assets were insufficient to meet the demand, and reductions of Rs. 37,313 were granted. The scope of this revision however was much too limited. The seasons continued unfavourable, particularly for the *mar*, which had hitherto escaped serious loss. In 1895-96 the revenue was nearly $3\frac{1}{2}$ lakhs in arrears, and further reductions amounting to Rs. 34,866 were given by Mr. Fremantle. After the famine the seasons were fair but balances continued heavy.

Thus in the interval that has elapsed since Mr. White's revisions the district has deteriorated to a serious extent. It is true that there seems to have been no general fall in rent rates, which in this district are more or less traditional: rental incidences have fallen, but this is the result of the inclusion in present holdings of an unusually large proportion of newly cultivated land paying low rates. But in the year of survey the cultivated area was 13.95 per cent. lower than at last settlement. Population also had fallen between 1881 and 1901 from 383,400 to 361,590. The statistics of alienation show that 36.38 per cent. of the land had been transferred by sale or mortgage in seventeen years; and it is significant that the highest percentage (52) is in Orai, which was the most heavily assessed pargana. Finally the indebtedness of proprietors belonging to agricultural castes was estimated at 25 lakhs, and the burden in individual cases was crushing. These figures indicate the seriousness of the problem of revenue administration in a Bundelkhand district. This problem has recently received the special attention of the Government, and a determined effort has been made to find a complete solution. The first step was taken in 1901, when the revenue roll was examined, and the demand was summarily reduced from Rs. 9,74,460 to Rs. 8,33,082, and further allowances of a personal nature amounting to Rs. 30, 330 were granted as a temporary measure to relieve old proprietors who had suffered from a continuance of unfavourable seasons and high assessments. A regular system of remissions on a liberal scale has also been introduced, and it has been freely applied in all cases of serious injury

to the crops. The reductions of revenue, and the change in methods of assessment which will be described in the following paragraph, are the portions of the general scheme of amelioration with which a review of settlement operations is most directly concerned. It is not out of place however to refer to the special legislation for Bundelkhand. As Mr. Hailey observes, the expropriation of hereditary landowners in Bundelkhand does not mean merely the substitution of one landlord for another, but involves also a diminution of the cultivating body. The prosperity of the country is bound up with the existence of strong and solvent village communities. Marwari ownership is not a success, and it is not too much to say that the expropriation of the agricultural community is generally followed by the ruin of the village, in which the non-agricultural purchaser is frequently involved. The endeavour made in the Bundelkhand Acts to free the old proprietors from debt, to restore them to the soil, and to prevent future alienations is justified, not only as it might be elsewhere, by political considerations, but on purely economic grounds and in the interests of the public revenue.

9. It is clear from this brief *resumé* of its history that ever since last settlement the revenue administration of the district has been attended with many difficulties. Those difficulties were caused in part by an unnecessarily high revenue, but it has gradually been made clear that the essential defect was the unsuitability of the general methods of assessment. In respect of changes of settlement procedure the history of Jalaun is peculiarly interesting. It was in this district, according to Mr. White, that the Punjab plan of *khasra* measurement by *patwāris* was first attempted. It was here that the rules were first evolved which insisted on the necessity of basing assessments as far as possible on actual rent rolls, and it happens that it is in connection with the settlement of Jalaun again that the very considerable departure from previous practice has been sanctioned, which finds its place in the special rules for assessment in Bundelkhand. The necessity for a change in the direction indicated by those rules is beyond question. In the Directions to Collectors, it was said that "the Government agrees to relinquish the excess in a good year and it is fair to expect that the deficiency of a bad year should be made good from the accumulated surplus of the past or the anticipated surplus of coming years." But the imposition of a moderate average demand, remaining constant for the period of settlement, is unsuited to the condition of a district such as Jalaun. The extreme vicissitudes of the seasons, the long periods of depression to which districts of this type are liable would make it impossible for perhaps the most thrifty, without the aid of large capital, to meet with regularity a demand that is calculated on any average of years. It is inevitable, further, that the peculiar conditions of the country should affect the character of its people. The most potent factor in encouraging thrifty agriculture is certainty in the proceeds of labour. Thus it has been found that in villages to which canal irrigation is extended *gujars* become good cultivators, though their caste-fellows in neighbouring villages with less advantages retain a preference for their hereditary practices of robbery and cattle lifting which seem to them as profitable as agriculture. Now in Jalaun the conditions are such that, while in a good year fine crops are reaped with a minimum of labour, in an unfavourable season disaster cannot be averted by good husbandry. The liberal revenue policy of the last few years has undoubtedly encouraged exertion ; but until the canal system is more fully developed, agriculture must continue to be a hazardous occupation. These conditions, it is needless to say, have long been recognized. In reviewing Mr. White's report on the assessment of Kalpi, where it will be remembered a system of abatements was allowed, Government observed that the Board would have preferred an assessment at full rates coupled with prompt remissions in bad years, and added that the general question of assessment and collection in Bundelkhand was under consideration. It is only in the Bundelkhand rules, sanctioned in 1902, however that effect has actually been given to the change in principle that has long been recognized as desirable. The main features of the new scheme are well known. The

important principle is that the fixed assessment continuing for the term of settlement is done away with, and gives place to a demand that is adjusted from time to time to the area under cultivation. The adoption of this principle changes the whole character of the Settlement Officer's work. The demand he fixes must be a fair one under existing conditions, but he has no longer to attempt to determine an average that can be paid in spite of considerable fluctuations. His chief concern is to see that his demand can be paid in normal years, and that it supplies a fair basis for subsequent revisions. Subsidiary to the main principle on which the rules are founded is the direction that the assessment in all cases is to be based on the area actually under cultivation. The Settlement Officer has in the first place to exclude all fallow in holdings, and if necessary to make a reduction in the rent on account of the fallow excluded. He has then to distinguish between what is called *nautor* and established cultivation. This rule is founded on custom, since in Bundelkhand, land when it is first broken up, or after a long fallow comes again under the plough, is always leased rent-free or on a favoured rent for the first few years of its cultivation. Separate rates are therefore fixed for such land as comes under the definition of *nautor*, and full rates are applied only to established cultivation. These are the rates used in the actual assessment. In addition the Settlement Officer has to fix all-round revenue rates to be used in future periodical revisions, and revision takes place more or less automatically by the application of these rates to the ascertained area.

10. The analysis of rents into the demand on account of fallow, of *nautor* or of established cultivation, introduces a new complication into settlement work. In Jalaun however the task of the Settlement Officer was much simplified by the fact that in the great majority of cases rents are recorded for each field separately: the distribution of the rental which is essential to the process required by the rules was therefore easy, and the rents assigned to the established and *nautor* areas may be regarded as actuals. The existence of numerous field rents, permitting the direct calculation of soil incidences for comparison with the traditional soil rates which are always available, also facilitated the determination of standard soil rates. The question remained whether the rates ascertained by inquiry or calculation of incidences could be accepted as they stood, or whether an abatement was necessary to allow for bad seasons. This question has been referred to in connection with Mr. White's assessment. It has been very carefully considered by Mr. Hailey, who has come to the conclusion with which the Board agree, that while the tenant gets a remission proportionate roughly to any area that he is unable to cultivate, there is no definite custom, such as Mr. White described in his Kalpi report, of adjusting the rent each year to the crop. The rents in fact are not high. The district, it must be admitted, has deteriorated, but the prices of produce have risen enormously, and yet rents are practically the same as at the time of Sir William Muir's settlement more than 60 years ago. They are not "fair weather rents" entirely as Mr. White called them, payable only in good seasons. In abnormal seasons, arrears are very heavy: but for abnormal seasons no settlement can allow, and it is precisely for this reason that the system of settlement has been changed. In normal years, as Mr. Hailey has shown, arrears are not more than 7 or 8 per cent. His deductions from the rental amount to 3·20 per cent. on account of fallow *plus* 2 per cent. in the portion of the rental assigned to established cultivation, and 31·53 per cent. in the portion assigned to *nautor*. The smallness of the deduction in the case of established cultivation requires notice; but apart from the deduction for fallow, which should also be taken into account, it is accounted for by the fact that in certain classes of villages, such as those recently released from attachment, or deteriorated maháls in which the land was again coming under cultivation, the rents in the year of survey were below normal; while in others such as villages to which canal irrigation had been extended but so far without raising rents, the rent roll was almost certain to rise. The Settlement Officer therefore considers it probable that the rental demand of the year of survey will ultimately be found to have been a lenient basis of assessment.

The case of *nautor* rents was very different. Cultivation had risen from 532,558 acres in the survey year to 559,684 in 1311 *fashi*, and in some villages the Settlement Officer found that the improvement was too great to be overlooked altogether: to alleviate the enhancement at the next quinquennial revision it was decided in cases of this kind to base the demand on the figures of years later than the survey, and Mr. Hailey's assessments are made on a cultivated area of 548,158 acres, which is 15,600 acres in excess of the survey area. But partly to graduate the enhancement of revenue, and partly to allow for a possible falling off before the next revision is due, a low rate was applied in these cases to the new cultivation, and the result was a considerable difference between the recorded and accepted rents. On the recorded rent roll of Rs. 12,90,030 the various deductions made amount to Rs. 88,984 or just under 7 per cent., and bearing in mind the change in the general character of an assessment that has been caused by the new rules and the relief provided by the system of remissions for failure of the harvests, the Board are satisfied that all necessary allowance has been made.

11. No other point in the assessment appears to call for notice, and the results may now be stated. The accepted assets of the cultivated area were Rs. 17,19,819. Deductions and additions for improvements, *sayar* and so on, were inconsiderable, and the net assets were Rs. 17,20,964. The revenue assessed is 47·76 per cent. of these assets; as Mr. Hailey says in view of the conditions under which the assessment was made, and particularly of the system of quinquennial revisions and the provision made for remissions, there was no reason for taking an exceptionally low percentage. The new revenue is Rs. 8,21,913, which is very little in excess of the revenue after special reductions (Rs. 8,20,709). The summary proceedings of 1901 and the present revision were conducted, however, on different principles; and though there is a remarkably close agreement in the gross results, there were considerable differences in individual villages. In some villages where no difficulty was experienced in collection, summary reductions were thought to be unnecessary; but at a regular revision of settlement, the revenue had to be lowered with reference to the assets: in others where improvement had taken place, an enhancement on the reduced revenue was found to be possible. The new revenue is no less than 23·49 per cent. below the revenue assessed by Mr. White, the reduction being largest (37·74 per cent.) in Orai, where over-assessment was most marked. If the natural tracts of the district are taken it is found that the reduction in the loam tract is only 9·47 per cent., in the *mar-kabar* and *rakar* it is from 25 to 27 per cent.: a result that clearly shows the comparative stability of the loam. The incidence of the revenue is 1·50 per cultivated acre, compared with 1·74 at Mr. White's settlement. The incidence on established cultivation is Re. 1·62, on *nautor* Re. 0·53. The all-round incidence of the rates fixed for future use on established cultivation is Re. 1·37. It is naturally lower than the incidence on the cultivation now classed as established, partly owing to the exclusion of the *gauhan* area, which is stable; and partly because any extension of cultivation must be in inferior land, and the Settlement Officer had to allow for this circumstance in fixing the rates for future use. The revenue at last settlement was Rs. 10,74,295. If the 64,122 acres that have become fallow since then should come under established cultivation, assuming the present *nautor* area as a constant factor, the Settlement Officer estimates that the revenue would rise to Rs. 9,10,081, and this he regards as a maximum, presumably under present conditions of rent.

12. The Board have much pleasure in bringing to the notice of Government the excellence of the work done by Mr. Hailey as Settlement Officer and by Mr. Keane, who during the last season of the operations was his assistant. The assessments of these officers were sound and careful; they were passed with very few alterations, and they have been favourably received by the people. The quality of Mr. Hailey's reports is exemplified in his able summary of the conditions and results of the revision which is now submitted. Looking to the clearness and

thoroughness of this report the Board have thought it unnecessary to follow the Settlement Officer over all the ground he has covered, and have taken the opportunity of dealing with the more general questions of revenue policy which have given the settlement of Jalaun a special interest.

13. The assessments of the different parganas have been sanctioned by the Government, and the question now to be decided is the period for which they should be confirmed. Fluctuations in cultivation are provided for by the new system of settlement. The chief point to be considered is the probability of a rise in the rents of the irrigated areas, to which reference has been made above. So far the introduction of canal irrigation has had little influence on the rents. When the new reservoir at Dhakwa is completed, irrigation will not only extend, but it will become far more secure than it is at present; and there is every reason to expect that, in time, rental conditions will change and rates will rise. But, to judge from the past history of the district, the rise is likely to be gradual in any case: improvement will certainly be retarded by the effects of the present famine; and though, as the Settlement Officer remarks, the rental of survey may ultimately be found to have been a lenient basis of assessment, this is scarcely probable in the immediate future. Extensions of irrigation will yield a return in the form of water-rates; and, under the fluctuating system, the land revenue will rise at the periodical revisions as the cultivation expands. The revenue, therefore, will benefit by improvement in the condition of the district; and, in the circumstances, the contingency of a rise in rents does not appear to be a sufficient reason for shortening the term of settlement. The Board recommend that the settlement be confirmed for the usual period of thirty years.



I have the honour to be,

SIR,

Your most obedient servant,

R. W. GILLAN,

Secretary.

FINAL REPORT on the revision of the Jalaun Settlement.

THE Jalaun district is the northernmost of the Bundelkhand group. It is bordered on the north and north-east by the Etāwah and Cawnpore districts; on the south-east by the Baoni State; on the south by the Jhausi and Hamirpur districts; on the west it runs parallel with the Sampher and Gwalior territories. It possesses natural boundaries in the Jumna, Betwa, and Pahuj on all sides except where it touches on the Baoni and Sampher States; while on the west the boundary line is broken by an outlying portion of the Datia State which is thrust like a wedge into the centre of pargana Koonch. Its total area is 1,549 square miles, of which 78.43 square miles belong to the feudatory states of Rampura, Jagamanpura, and Gopalpura, situated in the north-west corner. There have been no changes in the area since last settlement, but three villages in pargana Kalpi, made over from the Hamirpur district in 1884, will now be settled for the first time as part of Jalaun. The district is divided into 938 villages and 2,355 mahals. The total population at last census was 3,99,726, of whom 3,74,682, or 93.73 per cent. were Hindus and 25,044, or 6.27 per cent. Musalmans. The density of population per square mile is thus 271, varying considerably in different parts of the district. In the well cultivated parwa tract of the north it averages 371 per square mile; in the central mar and kabar plain 242; in the ravine areas adjoining the rivers it is 187 only. The prevailing castes are Chamars (16.94 per cent.), Brahmans (12.43 per cent.), Thakurs (8.86 per cent.), Kachhis (6.76 per cent.), Koris (4.90 per cent.) and Ahirs (4.63 per cent.). The great bulk of the population is rural and engaged in agricultural occupations. There are only two towns of any size, Koonch and Kalpi, with 15,838 and 10,139 residents respectively: the smaller towns are Jalaun with 8,573, Orai with 8,458, and Madhogarh with 3,538. The trade of these towns is almost exclusively concerned with the export of agricultural produce; manufactures can hardly be said to exist. The district is connected with Cawnpore and Jhānsi by means of the Indian Midland Railway and metalled roads. Its internal communications are good and it is amply provided with both metalled and unmetalled roads.

2. The main physical features of the district are largely determined by the three rivers by which it is bounded. The same characteristics are common to all, varying only in proportion to their respective sizes. They are surrounded by a deep network of ravines, running as a rule from one to two miles from the stream. These ravines are succeeded by a bank or belt of high land, the surface of which gradually falls the farther the river is left behind. Excluding the gaps left where the boundary lines touch the native states, the interior of the district thus forms a wide flat basin encircled by a narrow rim of higher ground. So far as can be judged from rough observations of the water level of wells, the surface of the district should be lowest about the centre, where the level seems to vary from 50 to 70 feet; on the higher land round the extremities it is rarely less than 90 feet. This conformation of the country may be traced in the course taken by the Betwa canal, the main arms of which run along the upland adjoining the Pahuj, Betwa, and Jumna, while the distributaries branch off through the heart of the district, emptying themselves for the most part in the ravines of pargana Kalpi. The drainage of the area is supplied by two streams, the Non and the Melunga, the former of which rises in pargana Orai and drains the south of the district; the latter, starting not far from the town of Koonch, pursues a circuitous course through the Jalaun pargana and emerges in the north of pargana Kalpi. The two streams unite about the centre of the latter pargana and flow into the Jumna. Following the example of the larger rivers, they have carved deep ravines in their passage, which increase in extent the nearer the Jumna is approached. As a consequence of the action of these streams, the Kalpi pargana is cut up by a tracery of ravines and contains more barren and sterile land than any other part of the district.

The natural divisions into which the district falls are comparatively few and clearly marked. Around it is a fringe of ravines, almost valueless from an agricultural point of view. Where the formation of the ground permits, they are sometimes edged by a strip of land covered by a rich riverine deposit; but for the most part they are unculturable, and consist of a series of low hillocks thickly strewn with nodules of kankar. Sparsely clad with the thinnest vegetation, they present from the upland the most complete picture of desolation.

As is invariably the case with high land, the upland which succeeds the ravines is poor in quality, though its natural poverty is to some extent counterbalanced by the facilities for canal irrigation. It has a light coloured, hard soil, the most valuable properties of which are washed away by the downward flow of the rain water. Except in the north, the gradual fall in the surface to the level plain of the centre can be clearly traced by the deepening in the colour of the soil. The light soil gives place to a dark *kabar*, which in turn is replaced by the *mar*, or black cotton soil. These two dark soils occupy practically the whole of the south and centre of the district beyond the upland, excluding the area in pargana Kalpi affected by the Non and Melunga; that is to say, the greater part of parganas Koonch and Orail, the southern half of Jalaun and the western portion of pargana Kalpi. From the areas of the circles which follow these natural divisions, it would appear that the *mar* and *kabar* tract extends over 1,010.38 square miles, or 68.71 per cent. of the whole district; the *rakar*, upland, and alluvial (which are usually included in the same village) over 290.25 square miles, and the pure *parwa* of the north over 169.94 square miles. These figures are approximate only, as the circles necessarily follow the village boundaries which may include portions of more than one of the natural divisions, but it would probably be correct to say that the *mar* and *kabar* tract, which includes patches of inferior *parwa*, comprises not far short of two-thirds of the district, and the pure *parwa* of the north about a tenth. Beyond the *mar* and *kabar* plain going northward, there is a neutral tract in which the soils are mixed *kabar* and *parwa*; the former, or darker element, gradually disappearing and being replaced by the lighter. The north of the district has a pure *parwa* soil, almost white in places. This area borders on the Doab and in many of its characteristics belongs rather to that part of the province than to Bundelkhand. In appearance and agricultural conditions it is dissimilar to the rest of the district. It is well wooded and studded with mango groves, whereas in the broad *mar* plains almost the only trees to be seen are sparse clumps of *babul* and *neem*. Its soil is a loam such as is common in Doab but rare in Bundelkhand; the land is closely cultivated and well populated, in strong contrast to the slovenly husbandry and thin population of the rest of the district. Now that it has the advantage of canal irrigation, it is the most productive and stable portion of the district.

The proportion of the cultivated and culturable area (excluding the feudatory states) is according to the new survey as follows:—

Total area in acres.	Cultivated area (year of survey.)	Percentage to total area.	Culturable but not cultivated.	Percentage to total area.	Groves.	Percentage to total area.	Uncultu- rable area.	Percentage to total area.
9,41,162	5,32,558	56.58	2,00,102	21.26	9,180	97	1,99,322	21.19

Character of the
land.

3. The cultivated area of the district has been classified into the following classes of soils:—

Soil classification.							
	Mar	Kabar.	Purwa.	Bakar.	Kachhar.	Tir.	Total.
Area in acres ...	1,62,637	1,58,382	1,49,547	50,589	9,971	1,529	*5,32,655
Percentage to total cul- tivated area.	30.53	29.73	28.08	9.50	1.87	.29	100.
*The figures for alluvial mahals are for 1311 faali.							

The mar is a calcareous soil of a prevailing blackish hue interspersed with small lumps of kankar, friable and very retentive of moisture. It possesses a high degree of fertility, growing year after year crops of mixed wheat and gram with neither irrigation nor manuring: it is easily worked and receives a minimum of preparation, two or three ploughings ordinarily sufficing. It is a most profitable soil to cultivate, because, while yielding an outturn not far short of irrigated land, the expenses of tillage are small. It is, however, exposed to peculiar dangers. Partly because it quickly becomes oversaturated with moisture, and partly because the rabi is the more profitable crop, little kharif is sown in mar and it is practically a one crop soil: the failure of the rabi therefore means the loss of the whole harvest. Its one crop, wheat and gram, suffers in an unusual degree from rust which spreads with extraordinary rapidity in wet springs. Kankar, too, runs riot in it, throwing large areas out of cultivation, unless checked at its first appearance.

Though the area under cultivation in year of survey was slightly smaller than that of the mar, the kabar is the most widely diffused of any soil. It consists of two kinds—the pure dark kabar which has more in common with mar, and the lighter coloured variety, probably containing an admixture of parwa. Both kinds are distinguished by extreme hardness and cohesion. The dark kabar possesses in a lesser degree the retentiveness of moisture which characterises the mar, but the lighter coloured soil dries quickly as soon as the rains are at an end. Kabar is sown indifferently with rabi and kharif crops, though the former crop is in excess of the latter. In the kharif, the principal crops are cotton and juar; in the rabi, either mixed wheat and gram, or gram only. Both harvests are uncertain from the peculiarities of the soil. If the rains are heavy, the land becomes a quagmire, in which the two principal crops, neither capable of standing an excess of moisture, cannot be sown or, if sown, rot off. After the cessation of the rains the land hardens rapidly and cakes to such an extent that it cannot be turned over by the plough. If the rains cease early before sowing time, the surface becomes iron bound and the seed cannot be put into the ground. For instance, in 1904 the rains were unusually heavy in July and August, but ceased abruptly towards the end of that month—the result was that in the kabar lands little kharif was sown and, except where irrigation was available, only a small area of rabi could be put down. Provided the distribution of the rainfall is favourable, kabar grows fair crops, but owing to its natural stiffness, it breaks up into hard lumps and seed cannot be sown so closely as in the mar or good parwa.

The latter soil in its pure form is almost confined to the north of the district and the alluvial areas. Elsewhere—that is on the uplands, or in the mar and kabar tract and in what has been called the neutral tract—it is found in an impure form, mixed with kabar and hardly distinguishable from the lighter coloured variety of that soil. In its impure or mixed form, it possesses most of the unfavourable features of kabar, and, being less fertile, is usually accounted inferior to it. The pure, or good parwa, is a loam of mixed clay and sand. Its colour is usually grey, though in places it assumes a reddish tinge. It is a fertile soil, and with the aid of manuring and irrigation will grow most varieties of crops. Owing to its porous character it is capable of standing any amount of rain, and, even if the rainfall ceases early, can still be prepared for the rabi. The wheat, which is of different description to that grown in the mar, appears to suffer very little from rust. The northern parwa tract is the only part of the district which shows any improvement since last settlement.

The rakar is the refuse soil lying on sloping ground or in ravines; it is usually thickly strown with kankar and in its poorer forms is too weak for continuous cultivation. It ordinarily produces only the inferior kharif crops, such as bajra, til, and some cotton. Its harvest is highly precarious.

The other two soils, tir and cachar, are alluvial, and their quality depends on the state of the annual floods.

The above résumé of the main characteristics of its soil will show the precarious nature of the agriculture of this district, and the danger which exists of frequent failures of the harvest. Though reference has been made to irrigation as reducing the danger, it was, as will subsequently be pointed out, almost a negligible factor over the greater part of the district during the expiring settlement. Setting aside the canal irrigated areas, the district is not only dependent for its harvests on the annual rains, but the character of its soils is such as to require a peculiar distribution of the rainfall. Heavy rains are almost as destructive as very light. The years from 1886 to 1889, which started the settlement on its downfall, were without exception marked by abnormally heavy rain. On the other hand, the most favourable season between the commencement of the settlement in 1886 and the famine of 1896-97 seems to have been that of 1890-91, in which the rainfall was 13·1 inches only; but it was well distributed and the Collector reported that "the kharif and rabi would have given bumper crops had not locusts and hail damaged them." The famine year was ushered in by two wet springs which gave rise to rust in the rabi crops and almost ruined the wheat. The most favourable distribution of the rainfall is moderate rain, not exceeding 6 or 7 inches per mensem, in the earlier monsoon months, and about half that amount in September and October. Next to an actual failure of the rains the most serious calamity is their early cessation, in which event only the good mar and the northern parwa can be sown for the rabi, unless irrigation is available.

While dealing with the uncertainty of the seasons in this district, I cannot do better than quote the experiences of my predecessor and myself. Writing in 1873 Mr. White said "during the past five years we have had to one good season four bad ones, and of them one has been a season of severe drought." My experience is somewhat similar. Of the five harvests I have seen, one only, viz. the rabi of 1903-04, was a good one: of the remainder, one was indifferent and the rest partial or total failures.

Crops and agriculture.

4. In the following table the principal crops are given:—

Kharif.					Rabi.					
Juar.	Bajra.	Cotton.	Oilseed.	Total.	Wheat and gram.	Gram.	Bejhar.	Linseed.	Total.	Dofasi.
*59,572	51,928	52,434	5,505 Other crops 5,307	2,14,746	1,55,453	1,17,695	23,533	16,545 Other crops 7,458	3,20,684	2,872

The figures are mainly of interest as showing the great preponderance of the wheat and gram crop, the absence of any high cultivation, (the area under crops of value, such as sugarcane and poppy being too small for separate record) and the large production of cotton. As a consequence of the scantiness of population, cultivation over the greater part of the district is apt to be slovenly. The land is imperfectly ploughed and cleaned; wide, irregular bands of grass are left between the fields; patches of *babul* scrub and kans are frequently to be seen among the crops. In the parwa villages of the north the population is more dense (371 per square mile) and superior methods of husbandry prevail: the carelessness that is sometimes observable is only such as is incidental to high caste cultivation. The average size of the holding—6·64 acres—and the plough duty—18·36 acres—denote an inferior style of cultivation. Intimately associated with, and partly the cause of this

* The acreage is that of the year of survey.

inferiority is the great prevalence of non-residency. Of the 938 villages in the district, 284 are uninhabited; and of the recorded sites many are nothing but hamlets consisting of a few huts. Cultivators come from the neighbouring villages, and, in the case of parganas Orai and Kalpi, from the Betwa side villages and native states. Such a system militates against the manuring and efficient preparation of the ground, the weeding and proper watching of the crops. It goes far to explain the surprising rapidity with which land falls fallow; for the strain on the resources of the agriculturist caused by bad seasons may compel him to restrict his cultivation to his own village, and the first sign of a coming depression is the abandonment of land by non-resident tenants. It fosters a backward state of agriculture and encourages the spread of noxious grasses, such as kans and dabh, which the outside tenant has not sufficient interest in the land to keep down. The introduction of canal irrigation will probably lead to an improvement in these conditions and to some redistribution of the population; hamlets are springing up near the canal, and the census figures appear to indicate an influx to the irrigated villages. If this tendency to concentration becomes more marked, it must be accompanied by an abandonment of the poorer lands in other villages—an economic change which, greatly as it may improve cultivation in irrigated areas, must operate to the serious disadvantage of zamindars of less favoured villages. Already in pargana Kalpi the desertion of some of the rakar villages is attributed to a movement of cultivators towards the irrigated villages of the south.

The area under kans by parganas is as follows:—

<i>Pargana.</i>				<i>Area in acres.</i>
Orai	...	...	...	8,416
Kalpi	...	...	...	1,866
Koonch	...	...	...	9,014
Jalaun	...	...	...	6,823
Total				26,119

Inspection of the pargana leads me to believe that the above figures greatly under-estimate the kans infested area in pargana Orai and that they include only the land in the immediate vicinity of cultivation. The damage is certainly greater in this pargana than elsewhere. Kans is as much the effect as the cause of deterioration. In villages belonging to strong unbroken communities it is dug up as soon as it makes its appearance. In adjoining areas held by ruined zamindars and absentee money-lenders it is allowed to seize hold of the fallow, and, once firmly rooted, spreads over the whole village. In Orai pargana it was almost possible to tell the condition of the proprietary from the extent of the kans infested areas—a wide spread of the weed being generally a sure indication of the collapse of the old zamindars and forced sales to money-lenders. Less or more will be heard of ravages of kans in future according as the district is prosperous, or the reverse. Its spread is preventible, and it can be eradicated so long as it appears only in small patches. But the work is laborious and somewhat expensive, and proprietors sunk in poverty can neither be expected to undertake it themselves nor afford assistance to their tenants.

5. By far the greater part of the district is in the hands of peasant proprietors, who, though they may let part of their land to tenants—often members of their own body—yet cultivate a considerable portion of the land themselves. The only large proprietor is the Raja of Sikri, owning 18 mahals and paying Rs. 9,680 in revenue. There are a certain number of proprietors with smaller but medium sized properties, such as Babu Jagdish Pershad of Babai with six villages paying Rs. 6,120; the Thakurs of Magroul with eight villages paying Rs. 5,375, and the Thakurs of Pirona with six villages paying Rs. 5,015. Besides these, a few money-lenders and land speculators, such as Mir Sadiq Hosain and Lala Sundar Lal of Kalpi, and Mt. Sahudra Noto in Koonch, have taken advantage of the troubles of the old proprietors

to carve out estates of some size. But as will be seen from the adjoining table the large proportion of the proprietors belong to village communities :

Tenure.	Total area.	Cultivated area.	Percentage to total area of district.
	Acres.	Acres.	
Single zamindari	131,278	77,789	8.27
Joint zamindari	244,429	129,014	13.71
Perfect pattidari	86,694	51,061	5.43
Imperfect pattidari	413,692	244,921	26.01
Bhayachara	63,473	29,381	3.12
Government property	1,596	392	.04
Total	941,162	532,558	56.58

The castes most widely represented and the area owned by each is shown below :—

Principal castes.	Total area.	Cultivated area.	Percentage to total area of district.
	Acres.	Acres.	
Thaknr	284,683	154,108	16.37
Brahman	265,076	152,623	16.22
Kurmi	103,783	77,928	8.28
Gujar	78,960	51,868	5.49
Lodhi	64,116	25,893	2.75
Kayasth	35,441	18,514	1.97
Bania	30,211	16,678	1.77
Ahir	28,946	9,977	1.06
Musalman	24,159	11,349	1.21

It will be seen that, though Thakurs and Brahmans predominate, there is a considerable area held by the good agricultural castes of Kurmis, Lodhis, and Ahirs. The tendency of the various castes has been to group themselves together in different parts of the district. The Kurmis, with their keen instinct for the most desirable localities, at one time owned the best part of the mar belt. East of them the Lodhis are settled and to the west the Gujars: the north and parts of pargana Kalpi are the stronghold of the Thakurs and Brahmans. Since the introduction of canal irrigation the distribution is acting somewhat unfortunately; for the mar, which produces one crop without much trouble but is not susceptible to high cultivation, is better suited for Brahmans and Thakurs, while low caste cultivation is required to make the most of the capabilities of the parwa. The two former are the only castes which exhibit excessive subdivision of their property; some of the Thakur families especially being overgrown to such extent as to call for special lenient treatment in assessment. The material condition of the proprietors will be dealt with in treating of the subject of alienations.

Tenants.

6. Statistics showing the prevailing caste of tenants are not available. The most numerous castes according to the census are Chamars (16.94 per cent.), Brahmans (12.43 per cent.) and Thakurs (8.86 per cent.). The Chamars are probably mainly ploughmen and labourers, though it is a matter of common observation that the lowest castes are taking up land as tenants in larger numbers than formerly. In most villages it would probably be found that the prevailing caste of tenants—certainly of occupancy tenants—was the same as that of the proprietors. The tendency has always been for castes to keep much to themselves, and the stratification introduced by one set of proprietors being imposed on another is little known in Jalaun. At annexation the engagement was made with the leading members of the community, while the rest sank into the position of tenants. Many, too, of the recorded tenants are co-sharers cultivating in one another's mahals or pattis, and much of the land in uninhabited villages is tilled by the smaller proprietors from adjoining villages. If a census were taken of the tenants it would probably appear that the majority were high caste (including Gujars in that category), though there is a very respectable minority of low castes. Among these must be included the

Kachhis, who form 6·76 per cent. of the total population and number a good many more tenants than labourers among them.

The large size of the average holding calls for some capital to work it, and implies a certain degree of wellbeing among the tenants. Land being plentiful and cultivators scarce, their position in this district is a peculiarly strong one. The fear of desertion forms an effective deterrent against either rackrenting or too severe pressure for rent in bad seasons. Occupancy rights are in many parts of the district viewed with favour as forming a tie to the land which the tenant is unwilling to break, and it is comparatively rare for steps to be taken to prevent their accrual. The claim of kinship often leads to the acquiescence in easy rents, even when part of the holding may be held on more exacting terms by subtenants. In spite of seasonal vicissitudes, the position of the Jalaun tenant compares favourably with that of his fellows in the more crowded districts of the province.

Both proprietors and tenants bear indifferent reputations as agriculturists. They are said to be unthrifty and indolent, backward and slovenly in their methods, incapable of struggling against adversity. This description of their character is borne out by the common saying that a Kachhi of Bundelkhand is no better as a cultivator than a Thakur of the Doab. That there is much truth in these charges cannot be denied and they must be reckoned with in framing a suitable revenue, but at the same time it must be pointed out that these defects are the natural outcome of their circumstances. It is idle to expect habits of thrift and steady industry in persons dependent on so hazardous a means of livelihood as agriculture in this district. Its character is such that they fluctuate between plenty—won with a minimum of labour—and indigence which no amount of exertion can avert: the qualities of mind and habits of life so engendered are hostile to steady and persistent effort. It is quite possible that, when the development of the canal system has relieved the district from the fear of drought and ensured a steady return for labour expended, its cultivators will differ no way from those of the rest of the province.

7. The district is irrigated by the Betwa Canal, the two principal arms of which, the Kuthaund and the Hamirpur, run the greater part of their course through its area. The canal is fed by a reservoir at Parecha in the Jhānsi district; and irrigation may be said to be practically confined to the rabi, as water is rarely available for the early kharif crops. This limitation precludes the sowing of sugarcane and cotton with its water. The canal was opened in 1885-86, but the cultivators were slow in taking to irrigation, and it was not until the past two or three years, that is after the year of verification, that there was any decided advance in the figures of the area irrigated. In 1902 its volume was increased by the raising of the weir, and many of the smaller branches obtained for the first time an adequate supply of water. The following figures will show the area irrigated by the canal up till 1904-05:—

Irrigation.

Years.	Total irrigated area.	Percent- age to total cultivat- ed area.	Years.	Total irrigated area.	Percent- age to total cultivat- ed area.	Remarks.
	Acres.			Acres.		
1885-86	12,166	2·14	1895-96	33,407	6·36	Famine year.
1886-87	8,606	1·48	1896-97	81,658	28·10	
1887-88	24,011	4·35	1897-98	47,176	9·33	
1888-89	31,550	5·72	1898-99	38,211	7·33	
1889-90	23,693	4·29	1899-00	35,759	7·16	
1890-91	38,316	5·98	1900-01	32,565	6·26	
1891-92	29,741	5·38	1901-02	47,803	8·88	
1892-93	21,827	3·97	1902-03	62,841	11·80	
1893-94	18,288	3·27	1903-04	77,286	13·81	
1894-95	7,934	1·41	1904-05	1,02,791	18·26	

Prior to 1902 not only was the area irrigated small, but the fluctuations indicate that the cultivators were by no means habituated to the idea of regularly watering their crops. The obstacles to the spread of irrigation are much greater than appeared at first sight, and it will be some time yet before the sanguine hopes expressed at last settlement of the "transformation of the face of the country, giving the fertility and variety of a garden to its present rude style of cultivation" are realised. Good mar

scarcely requires irrigation at all, and the cultivator is naturally averse to applying it if the winter rains threaten to fail; for a sudden change of the weather may bring on the much dreaded rust. The productiveness of inferior mar and kabar of all descriptions is considerably increased by a watering, and in some years it is only by aid of irrigation that they can be sown at all. But before irrigation can be generally applied, important alterations in agricultural methods are necessary, and such changes are slowly brought about. The cultivator has almost invariably sown the mixed wheat and gram crop in the rabi—his first discovery on using canal water was that the soaking he gave the land damaged the gram, and wheat only was sown; after the second year, the return from the crop fell off greatly, and hence the general complaint that canal water is harmful to the soil. In a number of kabar villages this was given me as the reason why the use of canal water had either been discontinued, or had never been tried. The more intelligent cultivators are discovering that the remedy lies in manuring and rotation of crops. But with a sparse population, scanty stock of cattle, and great scarcity of trees for fuel, the former is not forthcoming in sufficient quantities, while the latter implies a departure from traditional methods to which the Bundelkhandi is slow to adapt himself. Time must elapse before new methods are adopted; in the interim irrigation will continue to be regarded as merely an insurance against drought and will only gradually become a permanent factor in the agricultural system, and so effect the much needed improvement in the style of cultivation.

In the northern parwa villages the two principal obstacles to the effective utilization of the canal water, non-residency and sparseness of the population, are absent. The soil, too, probably repays irrigation more than any other; and a greater variety of crops has always been grown and manure freely applied. Writing in 1888 the Executive Engineer mentioned that the cultivators of this part had readily availed themselves of canal irrigation; in other places there had been a feeling of apathy or marked caution. In the early days of the canal there was water for sugarcane, and the area under this crop rose from 993 acres in 1886 to 2,540 in 1889. But as the demands for the rabi crop increased, water could no longer be supplied and such sugarcane as is now grown is irrigated from wells. Its cultivation will certainly revive as soon as the construction of the second weir provides a sufficient reserve of water for early kharif sowings; and when this improvement is carried out, the parwa villages should attain a high degree of prosperity.

It follows from what has been said above that irrigation has made little difference so far to the rent rate, outside the northern parwa tract. Elsewhere, it has been for the most part tentatively and irregularly applied; adopted one year when the rainfall was unfavourable and abandoned the next. Looked at in this light it improved collections, but did not, by adding to the tenant's income, enable him to pay a higher rent. The criterion justifying an enhancement appears to be not whether the field is irrigable or not, but whether irrigation had rendered possible the production of a more valuable crop. For instance, mar and good kabar, which naturally retain moisture, grow much the same crop whether irrigated or dry; and though the outturn when irrigated is larger, the additional value is largely absorbed by the water rate. No instance came to notice of any rise in the mar rate owing to irrigation: of pure kabar it is not so easy to speak definitely; some rise was occasionally found, but it was uncertain whether this was due to irrigation. On the other hand, the poorer parwa and kabar soils common in pargana Kalpi, will, by the aid of irrigation, grow good wheat crops instead of indifferent gram. Here the landlords have begun to demand higher rents, but as it was only subsequent to 1901 that much of this land came under irrigation, the advance is very slightly reflected in the rental statistics on which the assessment is based. Over a small group of villages in pargana Kalpi a rise varying from annas 8 to Re. 1 and Re. 1-2-0 was found to have taken place on wet parwa. In parganas Orai and Koonch small enhancements had been enforced in limited parwa and kabar areas adjoining the main canals. It was only in the irrigated villages of the parwa tract of pargana Jalaun—where barley has been replaced by wheat—that a

definite advance over a number of villages could be traced, which, though variable, gave an average of annas 10 to annas 12 per acre. Generally speaking it may be said that the canal has not been working a sufficient length of time to have any appreciable influence on the rents, and the distinction between wet and dry rates has not yet come to be clearly drawn, even in tracts where most use is made of canal irrigation.

8. The district of Jalaun as at present constituted comprises various portions of territory acquired at different periods. The first acquired were what were known as the Kanuni, or regulation parganas, of Koonch and Kalpi, ceded in 1805 and 1806. The former consisted of a strip of land along the Jumna, partly situated in the present Kalpi pargana and partly in the north-east of pargana Jalaun: the latter consisted of the greater portion of the southern half of the present Koonch pargana. Their total area was 335 square miles, and up till 1853 they formed part of the Hamirpur district. Of the rest of the district known as the pertali, or non-regulation parganas, comprising 1,135 miles, parganas Jalaun, Orai and Ata were taken over in 1839; while pargana Madhogarh and the cis-Pahuj villages of former pargana Daboh were assigned for the maintenance of the Gwalior contingent in 1843. The dates of the periods of settlement of the two tracts are as follows:—

Kanuni.
1840 Mr. Muir.
1873 Mr. White.
For thirty years.

Pertali.
1846 Mr. Ross.
1851 Major Erskine.
1863 Major Torman.
1866-7 Mr. White 16 years.

Kanuni and Pertali
tracts.

It was intended that both settlements should expire simultaneously in 1903, but it was found necessary to extend them and the dates of expiry are—parganas Orai and Koonch, 30th June 1905; parganas Kalpi and Jalaun, 30th June 1906.

The district is now settled for the first time as a single unit. The distinction between the two tracts, which is purely historical, will in future disappear, but its immediate effect is to increase the difficulty in procuring the statistics of the past settlements, and to render their aggregate figures of little value for purposes of comparison with those of the present settlement. References and comparisons with the preceding settlements have been necessarily restricted, and in some cases I have been compelled to show separately the figures of the two tracts.

9. Before describing the previous settlements it is necessary, in order to rightly appreciate their character, to give some account of the history of the district since it came under British rule. It is abundantly clear that in the early days of this rule, the district was enjoying a high degree of prosperity, and that it ranked among the wealthiest and most fertile in the province. Its prosperity was due mainly to the profits from the cotton trade, of which Kalpi was the principal market in Upper India, and where the East India Company maintained their agency for purchasing raw cotton. Mr. Muir states that the "purchases of Government amounted at one period to 40 lakhs a year and of private individuals, it is said, to 18." Writing* in 1843, Colonel Davidson, an officer stationed at Kalpi said, "Kalpi is distinguished in commerce as the chief mart in the Upper Provinces. Bundelkhand produces the finest cotton in all Hindustan, owing to the amazing richness of the jet black soil with which it abounds." On the same subject Mr. Muir in 1841 wrote, "the cotton plant grows to great perfection in Bundelkhand, its produce is not only more abundant but of softer texture and whiter colour than that of the Doab." At that time Koonch, now partly in ruins, was the great emporium for the trade of Central India, which found its way through the district to British territory. Contrasting its present condition with its former glory, the Settlement Officer remarked in 1873 that "whereas 30 years ago the town had 52 banking houses, now there are only four shops at which hundis could be obtained."

Fiscal history of
district.

Flourishing trade and a considerable population had their usual effect of enhancing the value of land round the centre of trade. This was particularly the case with Kalpi, which stands in an unfertile neighbourhood: even as late as the 1873 settlement, villages were assessed at and paid revenues which it now seems impossible to reconcile with their agricultural value. Describing the failure of the Koonch Settlement of 1841, the Commissioner, Major Pinkey, reported in probably

* Travels in Upper India.

somewhat exaggerated language "the settlement was made at a time when Kalpi was a gigantic cotton mart . . . land which does not bring in Re. 1-4-0 a bigha was eagerly sought after at Rs. 4."

In other respects, too, the district was relatively to the rest of the province peculiarly favoured. These were the days before canal irrigation had been generally introduced and a soil such a smar, naturally retentive of moisture, was in great demand. Its richness was constantly spoken of in superlative terms, though the actual outturn cannot now compare with that of the canal irrigated areas of the Upper and Lower Doab. There is also reason to believe that the land was more highly cultivated than at the present time. Mr. White counted in the Kanuni pargana of Koonch 157 large stone sugar pressing mills, many of which are still to be seen. The method of cultivation, which was by covering the young plant over with dhak leaves in the hot weather, bespeaks a greater degree of energy than the agriculturists now possess. Looking at the advantages the tract enjoyed in 1841, it is not surprising that the Koonch Kanuni pargana was paying a higher* revenue rate than any other district in the province (Rs. 3-1-9 per cultivated acre), and that Mr. Muir should have been able to impose as high a rate as Rs. 2-1-11 on the inferior Kalpi pargana, the whole of which at the present settlement is paying at a rate of Re. 1-1-3 only.

The decline of the district from the position it formerly occupied is due to a variety of economic causes. Foremost among these was the fall in the price of cotton, and the opening up of new tracts to the cultivation of the plant, which not only deprived Bundelkhand of its pre-eminence as a cotton producing country, but was followed by a deterioration of the staple. Secondly, the growth of Cawnpore drew off the trade from Kalpi and Koonch, while the construction of railways diverted the traffic which formerly came from Central India. Its one manufacture, viz. dyeing cotton from the *al* plant, was ruined by the introduction of artificial dyes. In other respects it would appear not that the district was retrograding but that, while most of the rest of the province was rapidly improving, its condition was stationary. In the Doab, canal irrigation was leading to the production of more valuable crops such as sugarcane and poppy, while Jalaun remained content with its wheat and gram. Having got back to normal after the mutiny troubles, population and cultivation remained at much the same point; only insignificant changes either up or down being recorded. Rents, too, showed the same unimportant movements.

It is clear that a Settlement Officer, undertaking the settlement of Jalaun at the time Mr. White did in 1868, laboured under a distinct disadvantage. The prosperity of the province generally was going up rapidly owing to growing trade, improved communications and extension of irrigation; rents were rising, population increasing, cultivation extending; settlements were elsewhere yielding considerable enhancements, and were in fact undertaken with the object of an enhancement of the revenue. Jalaun was expected like the rest to give an increase, though it is very doubtful whether it was in any position to bear it. A few exceptional men like Major Ternan might insist that a reduction was essential and carry their point, but most would swim with the tide.

A district starting with an inflated revenue is *prima facie* likely to remain highly assessed—in the first place because each settlement is largely based on its predecessor, and secondly because an exaggerated view will be taken of its capabilities. For one or other of these reasons the revenue of Jalaun has remained at a high pitch, and this point must be borne in mind in considering the necessity for the somewhat heavy reductions made in 1901 and at this settlement.

10. The first part of the district to come under assessment was the kanuni portion of pargana Koonch. Its principal assessments are as follows—

	Rs.
1806	... 1,72,517.
1821	... 2,18,140.
1841	... 2,02,798. Mr. Muir's.
1860	... 1,83,522.—Revision by Captain Maclean.
1874	... 1,93,610. Mr. White's.

Pargana settlements.

* Vide Board's report, para. 3, on Mr. White's settlement.

Mr. White's first impression was that the revenue would have to be lowered. He wrote that for "two reasons the new revenue cannot vie with the old demand; first, because the rent rate has somewhat lost ground, and secondly, because the standard of assessment has fallen from two-thirds to half assets, without there being adequate compensating improvements." His proposed assessment was Rs. 1,58,000. But he arrived at this figure by making somewhat arbitrary abatements from ascertained rents, and it must be admitted that his system did not read well on paper. His proposals were rejected and he was directed to assess on full rates. These rates gave a revenue of Rs. 1,87,000 at half assets, but Mr. White went beyond them and fixed the demand at Rs. 1,93,610. As the 10 per cent. cess was then imposed for the first time, the zamindars were rather worse off than under Mr. Muir's settlement. This assessment has called for extensive revision.

The assessment of Kalpi kanuni followed. Its previous revenues are as follows—

	Rs.
1806 ...	76,825.
1816 ...	1,15,834.
1826 ...	1,05,849.
1836 ...	93,423.
1841 ...	78,335. Mr. Muir's.
1874 ...	91,255. Mr. White's.

Owing to the precariousness of the area Mr. White was permitted to employ his system of abatements, which in practice gave good results, and though by no means easy, this settlement, where it had a fair chance, worked well. In the villages adjoining Kalpi it has collapsed completely, but for this the decay of the town itself, and not the severity of the demand is responsible. In many of the villages farther north it has stood through the past twenty years of depression without reduction.

The first eight seasons following these assessments were in the main prosperous and unmarked by any serious calamity. In 1886 the Settlement Officer reported that the revenue had been realised without difficulty, though the registers show a large number of alienations, and the settlement broke down with remarkable suddenness at the first touch of serious adversity.

The pertali parganas may be taken together. Their principal previous assessments are given below :—

	Rs.
1840 ...	4,13,839
1851 ...	6,60,886 Major Erskine's.
1863 ...	5,91,663 Major Ternan's including lapsed muafis.
1886 ...	7,40,338 Mr. White's.

The enhancement in the 1886-87 settlement was very unevenly distributed. It fell with great severity on pargana Orai, the revenue of which was raised by 28.20 per cent., contributing 38.46 per cent. of the total enhancement; and on pargana Jalaun, where the increase was 17.9 per cent., and the percentage of the total enhancement 31.71 per cent. Within these parganas the burden fell mainly on a particular class of village, viz. those with a good mar soil, in many of which the enhancements were very severe and not graduated by any effective system of progression. In the first circle of pargana Orai the increase was 38 per cent., and in 22 mahals it exceeded 50 per cent., yet the full jama was to be enforced in the third year.

The settlement fell at an unfortunate time. As will be seen from the annexed figures of the cultivated area of the district, a depression set in in 1884 which has practically lasted until 1902.

Year.	Cultivated area.	Year.	Cultivated area.
	Acres.		Acres.
1884-85	596,799	1896-97	353,424
1885-86	568,855	1897-98	501,367
1886-87	582,554	1898-99	520,968
1887-88	552,023	1899-1900	499,284
1888-89	552,023	1900-01	520,321
1889-90	552,196	1901-02	538,108
1890-91	557,051		
1891-92	553,108		
1892-93	550,208		
1893-94	558,661		
1894-95	561,000		
1895-96	524,922		

The causes are somewhat obscure. It was without doubt principally due to unfavourable seasons, but this is not the whole explanation as it extended to the mar villages, where the harvests continued good until 1902. Population, too, fell from 383,400 in 1881 to 362,390 in 1891 (excluding feudatory states), while kams appeared and spread with great rapidity. It seems clear that climatic conditions were not solely responsible, and if more accurate agricultural records existed, it would probably be found that the district was liable to be overtaken by cycles of depression, due in a measure to the "sickness" of the soils in consequence of the continued cropping with the same crops. It was not, however, perceived at the time that the falling off in cultivation was due to natural causes, and it was imputed to intentional concealment with a view to a lighter assessment. In pargana Orai where the fall had been the largest, the mistake was attended by the most serious consequences. The Settlement Officer reported that "there are 58 villages (out of 135) in which there has been fraudulent concealment of rents, or land had been thrown out of cultivation." In the numerous cases where the cultivated area fell short of the average of the past six seasons, concealment was taken for granted and the assessment based on the average cultivation of those years. Combined with this rejection of actual assets were faulty methods of assessment. The unrented areas were valued at the rent rate paid by non-occupancy tenants—often only a few Kachhis or Chamars: the allowance for proprietary cultivation was limited to sir which was not sublet; if sublet, the shikmi rents, usually rackrents, were accepted. The larger the proprietary body the less land is left for tenants and the higher the rent demanded; hence the poorer the community the worse it often fared. There is no doubt that this particular pargana was over-assessed, and it is impossible not to associate its subsequent deterioration and the unfortunate plight of many of its zamindars with the severity of the revenue then imposed. Since it came into force, cultivation has fallen by 24.56 per cent. and alienations amount to 52 per cent. of the whole pargana.

Next to pargana Orai, pargana Jalaun (old portion) suffered most. Here cultivation had not fallen to the same extent, and assets were rejected only in a small number of deteriorated villages in which it was desired to maintain the existing revenue. The principal cause of over-assessment was that mentioned above, viz. the application of non-occupancy tenant's rate to the unrented areas—regardless of whether they represented a fair valuation of the land and were not merely rents exacted from special tenants for special areas—and the inadequate allowance for proprietary cultivation. Rents, too, were accepted without examination as to whether they were realisable or not, and their resultant rates applied to the rented areas. There was the same uneven distribution of the demand as in pargana Orai, and some recklessly heavy enhancements were taken from the mar villages.

The three remaining smaller parganas of Kalpi, Koonch (pertali portions) and Madhogarh were settled in the following seasons of 1886-7. By this time an enhancement of Rs. 88,228 had already been imposed, and was thus closely approaching the limit of a lakh fixed by the Government of India. Moreover the Board had directed that in future the rate to be applied to the unrented areas was to be the joint occupancy and non-occupancy rate, and, though the Settlement Officer was able to show that over the whole pargana the difference between the two methods was unimportant, in particular villages it was very considerable. (In passing I may note that in Bundelkhand, where the tenant's area is often small and the body unstable, neither system is comparable to that of assessment by circle rates deduced from rates prevailing over wider areas.) The result was that these three parganas were treated with more moderation, and, except in a certain number of Kalpi villages where the fall in cultivation was interpreted as deliberate concealment, the assessment, though it might be termed full, was not excessive.

11. The character of the seasons for the first few years following the settlement, i.e., from 1886 to 1889, was much the same—the rains were abnormally heavy, and not only were kharif sowings interfered with, but the standing crops were partially destroyed. The account given in the 1886 report is repeated in much the same form in the following years. "There was heavy rain in August which ruined most of

the kharif ; the soil was so saturated with moisture that the crops rotted off." The rabi seems to have been fair, as the wheat yield was not less than 12 annas, except in 1889 when it was 11 : in that year it was mentioned that the rabi harvest was bad in the kabar owing to deficient rainfall. The villages principally affected were those with a kabar soil ; in mar the kharif is of minor importance, while the parwa and rakar, both of which can stand heavy rains, suffered less. In 1889 the Collector reported arrears amounting to Rs. 21,557, the great bulk of which had accrued in the villages situated in the neutral belt of mixed kabar and parwa in pargana Jalaun, and in a somewhat similar area of pargana Kalpi. In the same year 14 villages of the former tract were under attachment, and in 1890 the settlement of 10 was annulled. In 1889-90, the rainfall was scanty and there were no winter rains—both harvests were described as below normal. In the two following years the district enjoyed a respite and was favoured with fairly good harvests; but none the less arrears continued to accumulate, and successive Collectors confessed their inability to realise the revenue and pressed for a lightening of the demand. At the end of 1901 the arrears stood at Rs. 45,136 and in the following year some Rs. 30,034 were wiped off. Meanwhile the district was reported to be in "condition of progressive decay;" "the revenue was here and there unbearable. In several villages lately attached the total rents do not amount to the revenue and cesses." In 1892 a revision of the revenue was ordered in villages "where the assets are for the present insufficient to meet the Government demand . . . on account of the very serious deterioration attended by diminution in cultivation and rental, disappearance of cultivators, plough cattle and increased indebtedness of landholders." The revision was carried out by Mr. Steel whose reductions were as follows :—

Kanuni villages, Rs. 12,745.

Pertali, Rs. 24,568.

Events, however, proved that the revision was far too limited in its scope. From 1892 onwards a series of calamities befell the mar which had hitherto escaped. In 1892-93 a terrific hailstorm broke over the mar plains of Orai and Koonch destroying all the crops in its line of passage. In the following year the wheat was almost destroyed by rust in the mar villages, though the gram was untouched. In 1894-95 the wheat was again damaged to some extent and the linseed destroyed. Hitherto pargana Orai seems to have been struggling along under its load, but now the settlement completely broke down and village after village appears on the list of defaulters, which was assuming most formidable dimensions. In 1895-96, the district suffered from an early cessation of the rains and sowings in the kabar were short. The position had by this time become hopeless; the balance of arrears amounted to Rs. 3,47,834, of which Rs. 4,361 were due from the Court of Wards, and Rs. 13,458 from mahala under kurk tabsil. Accordingly Mr. Fremantle was sent to revise the revenue. His revision which took place in the famine year, before the full effects of that calamity were apparent, gave the following reductions—

Kanuni villages, Rs. 11,737-9-0.

Pertali, Rs. 23,129.

The seasons succeeding the famine year up till 1901 gave harvests of moderate quality; there was no actual failure but no bumper crops. Balances continued heavy, especially in pargana Orai; at the end of 1899-1900 they amounted to Rs. 98,582, and in the following year to Rs. 1,71,774, nearly all of which was remitted. In that year what are known as the ordinary and special reductions were made, which brought down the revenue from Rs. 9,74,459-15-0 to Rs. 8,33,082 and Rs. 8,02,752-15. As will be subsequently pointed out they were followed by a remarkable revival of agriculture and a rapid extension of cultivation. The new revenue was realised without difficulty and at the end of 1903-1904 the balance of arrears was nil.

The principal feature of this period under report is the remarkable rapidity with which deterioration set in and spread. The sole cause is not to be found in the unpropitious seasons. In reality other factors such as the nature of the soils, the

scantiness of the population, the character of the people and the severity of the assessment played a large part. Distress runs through certain clearly recognisable stages. In the first, rents only are affected; in the second, cultivation. If not acute and confined to a single season, it is marked only by heavy arrears of rent which are rarely recoverable. If continued, the non-resident tenant throws up his holding while the resident abandons his inferior fields. With resources thus weakened, the proprietor can neither assist the tenant nor maintain his own cultivation: his cattle die and he is unable to replace them: his credit fails and he can get no seed, and he too abandons the whole or part of his holding. Too often he mortgages his property and is sold up by a non-agriculturist. The result is that considerable areas fall out of cultivation; kans springs up in the fallow and once firmly rooted, spreads irresistibly and lays waste the cultivated fields. This has been the history of village after village in the worst affected parts of the district.

Alienations.

12. The following table shows the alienations from 1886 to 1902 :—

Pargana.	Area transferred.										Per-centage to total area.	Number of years purchase on areas sold.
	By sale.			By order of court.			By mortgage.					
	Area.	Price.	Revenue.	Area.	Price.	Revenue.	Area.	Price.	Revenue.			
	Acres.	Rs.	Rs.	Acres.	Rs.	Rs.	Acres.	Rs.	Rs.			
Orai ...	47,042	5,84,087	57,703	11,681	1,16,047	15,228	43,400	4,37,901	64,494	51.98	7.92	
Kalpi ..	55,310	3,28,315	36,233	6,050	33,669	5,410	16,509	1,06,353	16,226	30.06	8.10	
Koonch	41,603	7,80,015	67,588	7,005	77,008	11,602	28,911	5,40,894	59,113	35.86	10.11	
Jalaun...	43,889	6,80,874	61,370	19,088	1,39,918	27,049	21,943	2,39,829	23,061	31.52	8.73	
Total...	187,844	23,23,291	2,22,894	43,824	3,66,642	59,289	1,10,763	13,25,477	1,72,894	36.38	8.82	

Of the different parganas alienations have been most numerous in pargana Orai where 52 per cent. of the whole area has been transferred. In pargana Koonch, which stands next, the total has been swollen by purchases and resales by a wealthy resident of the Sampther state. It is unfortunately impossible to state definitely to what extent the village communities have alienated their land owing to the fact that the mutation registers make no distinction between agricultural and Marwari Brahmans who are the principal money-lenders. Brahmans as a caste are shown as having acquired 119,705 acres and lost 92,771: since agricultural Brahmans have been notoriously one of the most embarrassed of any of the castes, it is probable that they have lost much of the latter area and Marwaris gained most of the former, though part of the transactions are certainly inter-communal. The net loss and gain of the principal castes is shown below :—

Caste.	Net gain.	Net loss.
	Acres.	Acres.
Brahmans ...	26,934	...
Thakurs ...	...	28,766
Banias ...	21,456	...
Kurmlas ...	...	12,375
Gujars ...	...	11,140
Kayasths ...	2,230	...
Lodhis ...	...	3,490
Khatris ...	1,579	...
Goshains ...	...	905

The number of years purchase was 8.82 as compared with 10.8 on the pertali tract during Major Ternan's settlement. The figures are, however, lowered unduly by sales of deteriorated villages, some of which changed hands at almost nominal prices, the vendor's principal object being to escape liability for the revenue.

The question of alienations, in so far as they imply the passing of land out of the hand of peasant proprietors, assumes an unusual importance in Bundelkhand.

I have endeavoured to point out that there is no hard and fast line between tenant and proprietor in this district, and that the zamindars cultivate the land to a much greater extent than would appear from the proportion of the different classes of holdings. Not only are the bulk of the cultivators of uninhabited villages smaller sharers from neighbouring abadis—for the tenant has often not the means to cultivate outside his own village—but in the inhabited village itself many of the recorded occupancy and non-occupancy tenants are sharers cultivating in one another's pattis or mahals. The practice prevailing in this district of showing the fields actually owned by each sharer separately in the khatauni lends itself to this system. It may be said without much exaggeration that for every member of an agricultural community sold up, a cultivator of the soil is lost. For him has hitherto been usually substituted a Marwari—an alien to the soil whose last idea is to till it. In other parts of the province where the zamindar is merely a rent collector, it is not very material whether he is an agriculturist by profession or a money-lender. But in Jalaun, a Marwari who has ousted the old proprietors has often no means of finding cultivators in their place. Some of these money-lenders are residents of native states and merely own offices which are kept up by subordinates in this district: even when resident, the management of their property is generally left to ill paid karindas, who are neither the class of men to encourage tenants to settle nor to keep them when once on the land. The difficulties of managing scattered fragments of property in a thinly populated area are no doubt considerable, but, whether owing to their incapacity or the inherent difficulties of the task, Marwari ownership is emphatically not a success, and usually results in the deterioration of their new possession and a marked decrease of cultivation. To illustrate this point it is only necessary to turn up any partitioned village outside the parwa tract, and compare the reductions made in the revenue of Marwari owned mahals and those belonging to agricultural proprietors: the difference is most striking simply because the assets of the former have been allowed to run down. It was a subject of general complaint that the money-lenders benefited more than any other class by the ordinary reductions of 1901. To a certain extent the same would hold good of the reductions made in the present assessments. Though unavoidable if the assets are to be strictly followed, it is impossible for the Settlement Officer not to feel that by such remissions he is putting a premium on mismanagement. A curious piece of evidence of the inefficiency of Marwari management is afforded by the well known embarrassments of many of the firms—having locked up their money unprofitably in land, they have been unable to carry on their own ordinary business dealings, and quite a number have come to grief.

The acquisition of land by money-lenders has been stopped by the passing of the Alienation Act of 1903, but it was in full swing during the settlement under review and has left its mark over the whole of the district in wide fallows and the ruined houses of the ousted proprietors. As a remedy has been applied I do not further labour the point. I merely repeat what each of my predecessors in one form or another has placed on record, viz. that the prosperity of the district is bound up with the existence of strong solvent village communities: so long as they remain intact, a succession of unfavourable seasons leaves no permanent ill effect and is forgotten in the next good harvest: once they are broken up and dispersed, recovery, even with good years, is a slow and gradual process.

The operations under the Encumbered Estates Act render it possible to form some estimate of the indebtedness of proprietors belonging to agricultural castes. On the results of those applications to share in the benefit of the act which were sanctioned (certain applications were refused) either on the grounds that the applicant owed money to another agriculturist, or that his affairs were too hopelessly involved to admit of relief) the Special Judge, Mr. Stuart, estimates that the total liabilities of the proprietors belonging to these castes, likely to rank as good in a civil court, would amount to about 25 lakhs. Assuming that they form as much as $\frac{4}{5}$ of the whole body of proprietors, they owe, at a moderate computation, an amount equivalent

to three years' revenue. This must mean overwhelming indebtedness on the part of individuals, and, time after time, when inspecting their villages, proprietors have assured me that nothing but the passing of the act could have saved them from certain ruin.

Statistics of past
and present
settlements.

13. In the following table the principal statistics of the past and present settlements are set side by side :—

Cultivated area.			Population excluding that of feudatory states.					Ploughs.		
Last settlement.	Present settlement.	Percentage of decrease.	1881.	1891.	1901.	Percentage of decrease to 1881.	Percentage of decrease to 1891.	1886.	1900.	Percentage of decrease.
Acre.	Acre.									
618,916	532,558	13.95	383,400	362,390	361,590	5.69	.22	30,058	27,230	9.41

The above figures of cultivation at last settlement show area cultivated in the kanuni and pertali tracts combined—separately they stand, kanuni (1868-69) 153,176 acres : pertali (1884-85) 465,739 acres.

The fall in cultivated area by parganas is as follows :—

Pargana.	Cultivated area.		Percentage of decrease.
	Last settlement.	Present settlement.	
	Acre.	Acre.	
Orai ...	118,518	89,232	24.71
Kalpi ...	138,171	1,08,751	21.20
Koonch ...	163,978	1,52,311	7.11
Jalaun ...	198,248	1,82,264	8.06

It would be more instructive to take the natural divisions of the district.

Tract.	Cultivated area.		Percentage of decrease.
	Last settlement.	Present settlement.	
	Acre.	Acre.	
Parwa ...	77,502	75,655	2.38
Mar-kabar ...	466,685	394,427	15.48
Rakar, alluvial, upland.	74,728	62,476	16.40

It will be seen that in the parwa the fall is inconsiderable, thanks mainly to irrigation. In the rakar, etc. it would be still heavier but for an influx of cultivators after the famine from the Gwalior state to the villages along the Pahuj, in which cultivation shows an actual increase of 1,732 acres over the figures of last settlement.

In the figures relating to population the statistics of the feudatory states, with which this settlement is not concerned, have been excluded. The figures by natural divisions are as follows :—

Tract.	1891.	1901.	Percentage of increase or decrease.
Parwa ...	52,973	63,003	+18.93
Mar-kabar ...	252,434	244,374	-3.19
Rakar, etc. ...	56,983	54,213	-4.86

The figures of the parwa tract point to an influx of cultivators to this area from the more distressed parts of the district. This statement may appear to be contradicted by the figures relating to cultivation, but it must be pointed out that not the whole of this tract is irrigable and the immediate effect of irrigation is often to restrict cultivation by concentrating energy on the irrigated fields.

Owing to the considerable interval which separated the years of settlement of the kanuni and pertali tracts, it is necessary to show the rent rates separately.

Pargana.	Pertali.				Kanuni.			
	Non-occupancy.		Occupancy.		Non-occupancy.		Occupancy.	
	Last settlement.	Present settlement.	Last settlement.	Present settlement.	Last settlement.	Present settlement.	Last settlement.	Present settlement.
Orai	4.08	3.96	3.73	3.59	...	...	...	...
Kalpi	2.60	2.38	2.46	2.68	3.49	2.71	3.91	2.91
Koonch	3.70	3.63	3.52	3.43	3.85	4.07	3.91	4.47
Jalaun	3.68	3.14	3.36	3.40	3.10	3.40	3.77	3.64
Total district	3.51	3.13	3.27	3.28	3.48	3.39	3.86	3.67

The above figures would appear to indicate that there had been a decided fall in rents, except in the occupancy holdings of the pertali tract. Though the matter is open to doubt, my opinion is that there has been no general fall and that rents have remained almost stationary except in special classes of villages which will be alluded to. The whole question is highly complicated by the custom prevailing of letting nautor, or new cultivation, on easy rates. These are progressive, a low rate being taken the first year and the full rate deferred until the 2nd, 3rd, or even 4th year. Now when the kanuni settlement took place, the district was in a flourishing condition and cultivation was full; at the pertali, cultivation was falling rapidly. It may be presumed, therefore, that there was not much nautor at either settlement. On the other hand at this settlement the district was recovering from a period of depression and there was a considerable nautor area. Hence the all round rent rate was lowered by these temporary nautor rates. The difference these lower rates will make was curiously illustrated by the figures of pargana Kalpi for 1311 fasli; between the year of verification (1309 fasli) and that year, a number of proprietors were found to have raised their rents, but so large was the nautor area that the actual rent rate was Rs. 2.59 as compared with Rs. 2.61 in the earlier year. I now contrast the combined figures of the two tracts with the rate on established cultivation at this settlement. It will be seen there is a fairly close approximation.

Pargana.	Non-occupancy.		Occupancy.	
	Last settlement.	Present settlement (established only).	Last settlement.	Present settlement (established only.)
Orai	4.08	3.68	3.73	3.64
Kalpi	2.62	2.98	2.71	2.86
Koonch	3.77	4.04	3.84	3.99
Jalaun	3.64	3.45	3.40	3.47
Total district	3.51	3.56	3.45	3.58

In three classes of villages rents have undoubtedly fallen. These are (1) villages wholly or largely dependent on non-resident tenants. Here, in the absence of competition, the proprietors have been compelled to accept such rents as they could get. The large decline in the rent rate of pargana Orai is due almost solely to this cause. The population of the pargana is thin, averaging only 192 per square mile, and there are 24 uninhabited villages. Up till 1893 rents showed only a slight change, but from that year bad harvests caused a falling off in the annual inflow of immigrants from the Betwa side villages and native states to the mar plain, and compelled many of the smaller zamindars to restrict their outside cultivation. The result was a

steady decline in the rent rate of those villages dependent on non-resident tenants. Since 1900 immigrants have increased in numbers; many of the zamindars have replaced their stock; rents have gone up and in 1311 fasli the non-occupancy rate stood at Rs. 3-51. (2) villages which have undergone deterioration owing to spread of kans or scour of nalas; (3) certain alluvial villages along the Jumna. The fall in rents in these villages is accountable for the difference between the rent-rate of the Kalpi kauuni tract at the last and present settlements. The land is valuable tir and kachar, still highly rented, but paying nothing like the same rents as when the Jumna was a crowded waterway and Kalpi a flourishing town.

Against the fall in these villages must be put the rise in the non-occupancy rents in irrigated parwa already mentioned.

Assessment statistics.

14. The years of verification were 1309 and 1310 fasli, but, unless it is specially stated to the contrary, the figures quoted do not relate entirely to these years. The survey took place before the full effect of the reductions of the revenue had been felt. Coinciding with fair seasons and a development of the canal system, these reductions led to an improvement in the agricultural conditions which was very marked in certain parts of the district. Cultivation extended, rents rose, and proprietors rapidly replaced their lost stock. A comparison of the statistics of the year of survey with those of two following years is appended, rental statistics being omitted, as in the absence of separate figures for mustakil and nautor, they are misleading.

	Year of survey.	1311 fasli.	1312 fasli.
Cultivation ...	592,558	559,684	552,109
Plough cattle ...	58,834	80,303	79,219
Irrigated area ...	47,803	77,286	1,02,791

In individual villages the rise in the cultivated area and rental demand was found at inspection to be very considerable. The revenue, which had been subject to successive reductions, had become unduly light, and, had the assessment been based on the figures of the year of survey, it would have been maintained or only slightly modified. A demand so disproportionate to the actual income realised would not only have been unfair to Government, but would have resulted in a sudden and heavy enhancement at the next quinquennial revision, which, though perfectly justifiable, could not fail to press heavily on the zamindars. It was considered, therefore, advisable to take some part of the enhancement now and leave the rest until the next revision. Accordingly the assessment was based on the assets of the years 1311 fasli or 1312 fasli in 71 villages, especially low rates being fixed on the nautor. The enhanced rents on established cultivation, the stability of which remained to be proved, were rejected, and the assessment made on the rental demand of the year of verification. In alluvial villages, where the cultivated area is liable to fluctuation, the assets of 1311 fasli were accepted for purposes of assessment. The actual cultivated area on which assessment was based was thus 548,158 acres, or 15,600 in excess of the area cultivated in the year of survey.

Nautor rates.

15. It would be convenient at this point to explain the prevailing district custom relating to nautor cultivation—almost the only part of the rental system requiring special mention. The land of Bundelkhand, when left fallow, presents a surface of such hardness that it is with difficulty broken by the plough: it also becomes rapidly overrun with strong rooted grasses and babul scrub. The process of reclamation is somewhat slow and costly, and it has been recognised that a special inducement must be offered to the tenant to undertake it. Accordingly, scales of rates, varying with the quality of the soil and the difficulties involved in clearance, have come into existence, which increase annually in severity until a period fixed in advance is reached, when the full rent is taken. For instance, in kabar land—the

most difficult to reclaim—there are usually three progressions, and the full rent is not taken until the fourth year. A common first year's rent for inferior kabar is Re. 0-4-0 per bigha, advancing to Re. 0-8-0 the second, and either Re. 1, or the full rent, the third year. In mar, or good parwa, unless they are much overrun with babul scrub, it is most usual to give the land on a low rent, or rent free, the first year, and to take a full rent the second; if much clearing has to be done, as many as three progressions may be allowed. The custom occasionally gives rise to curious fluctuations in the rent rate and is largely responsible for the doubt which has been at times thrown on the correctness of the patwari's records. Closely allied with this practice is that of making allowances for fallow in holdings. Bad seasons, loss of cattle, spread of kans may compel a tenant to leave part of his holding uncultivated, and he is consequently unable to pay the whole of his rent. Except in the well populated north, it is generally more to the proprietor's advantage to take what he can get from the tenant than to eject him. Remissions are therefore allowed, roughly proportionate to the area fallen fallow; if the tenant brings the land again under cultivation, he is often allowed to pay at nautor rates. It must not be understood that the practice of granting remissions is either universal or any recognised part of the rental system: if the proprietors submit to it, it is because they cannot help it, and in a good village the defaulting tenant would probably be compelled to surrender the land he could not cultivate. But it is common enough in the poorer parts of the district and leads to the record of heavy arrears of rent.

Under the settlement rules, land that has been cultivated for less than four years—breaks of one year being disregarded—is classed as nautor. The definition is a liberal one and covers a good deal of land which has ceased to pay nautor rates. The proportion of nautor to established cultivation (mustakil) by holdings is as follows :—

Holdings.	Cultivated area actually assessed on.	Established cultivation.	Percentage to cultivated area.	Nautor.	Percentage to cultivated area.
	Acres.	Acres.		Acres.	
Non-occupancy ...	214,972	178,802	82.24	38,170	17.76
Occupancy ...	157,156	152,861	97.27	4,295	2.73
Sir ...	110,605	104,786	94.69	5,819	5.31
Khudkasht ...	53,787	45,083	83.82	8,704	16.18
Grain-rented ...	9	7	77.78	2	22.22
Rent-free ...	11,629	9,999	85.98	1,630	14.02
Total ...	548,158	489,488	89.30	58,670	10.70

N.B.—Figures of mahals and specific plots belonging to Government and those of revenue-free plots the nominal revenue on which is less than Rs. 10 are excluded.

16. The procedure and working of this settlement differ in several important respects from those of the preceding settlements. In the latter the revenue was fixed for a term of years, regardless of the fluctuations in cultivation; during this settlement the revenue will be readjusted every five years, whenever there is a rise or fall exceeding 10 per cent. in the cultivated area. Secondly, in the preceding settlements, the revenue was in theory so determined that over a series of years half the assets would be left to the proprietors; the deficiencies of bad years being made up for by the surpluses of good. Experience has, however, shown that such a system is unsuitable for precarious tracts held by peasant proprietors with no capital; since, even assuming that the proportion of good years to be equal to the bad, it must inevitably break down under the strain of a prolonged depression. It is now recognised that the only workable system is one by which prompt remissions are given on the occurrence of agricultural calamities, and rules to this effect are already in force. These two new principles now introduced materially affect the character of the settlement to be framed by the Settlement Officer.

New settlement principles.

He is no longer called upon to fix a revenue which will survive a series of years, good and bad: his assessment is required only to be suitable for normal years and to form a fair basis on which subsequent additions or reductions may be made. Provision being already made by the rules for variations of cultivation or for fall in the rental collections due to seasonal calamities, the problem is no longer to ascertain the average rental assets realisable one year with another, but the income the landlord should be able to collect in ordinary seasons. The necessity, therefore, for considerable deductions from the recorded rental demand or for low percentages of the assets, which the Settlement Officer would otherwise feel compelled to make in a precarious tract, is to a large extent removed. The secondary provisions for Bundelkhand settlements are also very favourable to the zamindars. By the first of these, fallow is to be excised from the holding and the assessment based on cultivated land only; by the other the nautor is to be separated from the mustakil with a view to the former being assessed at low rates for a term of years. Under the latter provision, not only is the zamindar's own new cultivation assessed at easy rates until the settlement is revised, but for part of this period he is receiving full rents from his tenants for land assessed at the lower or nautor rates.

Settlement operations.

17. As a preliminary to the settlement, the whole district, excluding the feudatory states, was surveyed. The work was commenced in October 1900 and finished in September 1903. Attestation of the khewats and khataunnis followed, Thakur Lekhraj Singh being posted to the district for this purpose in July 1902, and S. Mahomed Ahsen in December 1903. In spite of their great complexity the khewats were found to be in a good condition. The principal difficulty arose with regard to the cases in which land had been abandoned and possession taken by resident proprietors; often either by the lambardar or with his consent. When the revenue was reduced, the original proprietor returned and claimed the land, which the person in possession was usually most unwilling to surrender. These disputes will give the revenue courts trouble in the future, and are already finding their way to the civil courts. It appears to be a matter calling for the executive interference of the district authorities. It is neither desirable that a sharer or munzabtadar should be permitted to abandon his land in bad years and throw the burden of paying his quatum of the revenue on the rest of the community without some penalty, or that possession of the abandoned land should be usurped by unauthorized persons. A free use of section 152, Act III of 1901 would probably meet the case.

I was posted as Settlement Officer to the district in November 1903 and during that camping season inspected the Orai and Kalpi parganas. In November 1904 Mr. Keane was sent as Assistant Settlement Officer, and the two remaining parganas of Koonch and Jalaun were inspected and assessed in 1904-05.

Soil classification.

18. The first step in the assessment was the classification of the soil, which was carried out by the Settlement Officers. They were demarcated into the four natural classes of mar, kabar, parwa and rakar, together with the conventional class of gauhan—that is the highly cultivated and rented area adjoining the site. The alluvial soils are tir, bearing the richest deposit; and kechar, a somewhat inferior soil of the same character. The existing soil classification was found to be fairly accurate, though extensive corrections were found necessary in a certain number of villages. Occasional mistakes had undoubtedly been committed, but much was due to changes in the character of the land arising from physical causes. Passage of water, the scour of nalas, had converted good land to rakar, or first class soil to second; while elsewhere embankments, or changes in the course of streams, had led to an improvement. Finality is, in fact, almost as unattainable in classification by natural as by conventional soils. The two principal alterations introduced in order to make the system conform more closely to the natural conditions were (1) the addition of the gauhan, which has a value quite irrespective of its soil, and (2) the subdivision of the soils, where necessary, into two grades, a superior and an inferior. This addition

was especially required in the case of kabar which consists of two different kinds, the pure black and the lighter coloured, the latter of which pays on an average Re. 0-8-0 per bigha less than the former. In mar and parwa, too, a superior and inferior kind were found in the same village or circle paying different rates. The useful distinction of rakar moti and patli was also introduced. The soils and their subdivisions are shown in the appendix.

19. The second step was to divide the pargana into circles, or groups of villages, possessing a similarity of soils and natural conditions to which the same scale of rates could be fairly applied. The grouping of villages at last settlement was by non-occupancy rates—an arrangement which has nothing to recommend it, as it sets up no standard by which severity or concealment of recorded rents can be judged, and is particularly valueless when tenants' holdings may only extend to a small portion of cultivated area. The district lends itself on the whole to the formation of compact circles with distinctive natural features: in the mar and parwa plains, or ravine areas, there was not much difficulty experienced, but it was a different matter where the land was cut up by streams, or one soil was shading into another. Here circles had to be formed of small scattered groups. The villages within each circle are not all of equal merit: some are above, and some below the average, but all are sufficiently of a type to bear the same average rates, modified if necessary to suit the special circumstances of the individual village.

Framing of circles.

20. The framing of circle rates presented less difficulty than usual. Except in the parwa tract, field rents are much more common than lump, though the recent survey has in many villages obscured the old custom by showing the rents by holdings. The circumstances of the district account for the prevalence of field rents instead of lump. The latter are the natural system where the land of the village differs considerably in value, and it is desirable to let the good with the bad; where, however, its position with regard to the site does not, unless immediately adjoining, affect its value, and there may be but two or even one class of soil, the system of field rents is the more suitable. Again, the fields are often of considerable size—five and even ten acres being by no means uncommon—and of themselves constitute substantial units as big as ordinary holdings.

Circle rates.

The rent of the field is largely determined by bigha (·47 of an acre) rates for each class of soil. At bottom, these represent nothing more than the current value of the land, but changes being infrequent, they have gradually acquired by prescription a certain weight, and are now quoted as the proper and fair letting prices. They certainly vary closely with the quality of the soil, different grades of soils being often differentiated by ascending or descending scales of rates. Here, too, the system is mainly of the outcome of the conditions of the district. Some sort of recognised standard rates are necessary for letting land to non-resident tenants, who merely take what they can cultivate for the year; while the practice in letting nautor presupposes a bigha rate on which progressive increments are based. It does not, of course, follow that the quoted bigha rates when applied to the soil areas will give the same, or nearly the same, total as the recorded rents, and it often happens that, owing to a variety of circumstances, such as the caste of the tenant, or the deterioration of part of the land, they bear nothing more than a very general relation to the actual rents. Still the correspondence is frequently close, especially in good mar and kabar lands, where the Rs. 2-8-0, Rs. 2-4-0, and Rs. 2 per bigha rates have been the standard for many years past. The correspondence is smallest where rents are undergoing changes as in irrigated or deteriorated tracts: here the new rates have not taken a definite shape and the rates quoted may merely reproduce the old and altered conditions. In spite of these limitations, the soil rates proved of the greatest assistance in framing circle rates: they were supplemented and corrected by a careful analysis of the rent rolls, but in a number of instances the results tallied, and the soil rates were adopted as the circle rates, either in the form quoted, or with only slight modification.

A comparison of the valuation of the area in established cultivation at circle rates and the actual recorded rents (excluding 40 villages omitted from consideration in framing rent rates, either owing to manifest concealment, or excessive deterioration) is appended.

Pargana.	Non-occupancy.			Occupancy.		
	Recorded rent of established cultivation.	Valuation at standard rates.	Difference + or -	Recorded rent of established cultivation.	Valuation at standard rates.	Difference + or -
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orai ...	1,14,375	1,14,297	- 78	48,698	48,258	- 442
Kalpi ...	90,494	90,057	- 437	70,370	73,036	+ 2,666
Koonch ...	1,83,131	1,82,626	- 505	2,00,119	2,06,899	+ 6,774
Jalaun ...	1,95,225	1,93,018	- 2,207	1,96,337	2,01,948	+ 5,611
Total ...	5,83,225	5,79,998	- 3,227	5,15,524	5,80,133	+ 14,609

Occupancy and non-occupancy rents.

21. The following table shows the respective non-occupancy and occupancy (including ex-proprietary) rates, the rates on nautor and established cultivation being shown separately and in combination.

Pargana.	Non-occupancy.			Occupancy.		
	Established cultivation.	Nautor.	Combined.	Established cultivation.	Nautor.	Combined.
Orai ...	3.68	1.56	3.36	3.64	2.49	3.59
Kalpi ...	2.98	1.64	2.53	2.86	1.89	2.82
Koonch ...	4.04	1.73	3.85	3.99	2.67	3.97
Jalaun ...	3.44	1.60	3.17	3.47	2.21	3.44
Total district	3.56	1.68	3.22	3.58	2.26	3.54

As the bulk of the nautor is in non-occupancy holdings, it follows that with nautor included the non-occupancy rate is below that of the occupancy; excluding this rate there is little difference. But the aggregate figures, in so far as they show a close approximation between non-occupancy and occupancy rents, require explanation. From an examination of the rent rolls the general rule appears to be that in good villages the non-occupancy rate is higher, and in inferior villages the occupancy. The reason is that in the former there is a certain competition for land, and non-occupancy rents may rise if conditions are favourable; on the other hand, with an essentially non-litigious proprietary the occupancy rents are relatively unprogressive. In inferior villages the occupancy are the stable and resident tenants: the non-occupancy are often non-residents, or broken men from other parts holding on low or nominal rents. Again, too, in these villages there is a greater diversity of quality, and the occupancy tenants hold the better land. The circle rates being the average rates paid by permanent tenants, give results slightly below the non-occupancy totals and above the occupancy, because they tend to exceed the latter in the more highly rented villages and fall below them only in those with a lower rental. Also, in the irrigated areas the occupancy rents failed to disclose the rise in the value of the land, the bulk of the rights having accrued before the opening of the canal; and the non-occupancy rents had to be mainly followed in fixing the wet rates. This was the more necessary, as a large proportion of the applications for enhancements of occupancy rents were received from irrigated parwa villages. In all, of 688 submitted, 385 came from pargana Jalaun, principally from these villages.

State of rents.

22. Rents are practically all cash rents. With a few exceptions they were found to be correctly recorded. In a certain number of villages rents seemed low at first sight, but satisfactory explanation was generally to be found in the condition of the village and the character of the tenants. Intentional concealment had been practised by a very few proprietors only, principal among whom was a land speculator of Kalpi, who had lowered the rents of his villages with a view to a lighter

assessment. The circumstances of the proprietors are such as to preclude the possibility of any general concealment. They are for the most part ignorant, and wholly dependent on the patwari for keeping their accounts; they have little hold over their tenants. Successful concealment demands a duplicate system of accounts, and absolute submission of patwaris and tenants. A more material point is the realisability of the rents; that is how far they represent a fair demand which can be collected with ordinary diligence, or are maxima rents realisable in full only in good seasons. The question came under discussion at the intermediate revisions of the settlement, when the latter view was freely expressed; and it was further stated that a system of *chhut* or remission prevailed, under which a tenant in unfavourable years paid a portion of his rent only and received an acquittance for the whole. It must, however, be pointed out that these inquiries were made in years of great depression. Of this system of remissions I could find no trace other than that already alluded to of allowing a roughly proportionate reduction for the amount of fallow in holdings which the tenant is unable to cultivate. The conclusion I came to was that the rents formed a fair and reasonable demand in normal years, though owing to the small number of tenants and the absence of competition for land, somewhat higher arrears must be expected than in an ordinary district outside Bundelkhand. In abnormal years arrears are very heavy, as quite apart from the severity of the calamities to which the district is subject, landlords in their own interests are reluctant to bring much pressure to bear on their tenants. That the rents generally are not high may be inferred from the slight changes the rates have undergone over a long period of years—as will appear from a comparison of the rates at Mr. Muir's 1841 settlement and those of the present day.

Mr. Muir's rates.

	Rs.	a.	p.	
Mar, first class	5	2	0	per acre.
Kabar, ditto	3	12	0	"
Parwa (white)	4	8	0	"

Rates at present settlement.

	Rs.	a.	p.	
	5	4	0	per acre.
	4	4	0	"
	4	2	0	" (excludes <i>ganhan</i>).

Although the district was then in a relatively better condition than now, yet prices of produce (apart from those of cotton) have risen enormously. *Gram and linseed for instance, which were then often drugs in the market, now fetch higher prices than were realised for wheat. The term maxima is, therefore, hardly applicable to such rents.

On the whole, too, they are realisable without an excessive percentage of arrears. The following table shows the percentage of arrears from 1884 to 1900 :—

Year.	Demand.	Collections.	Percentage of arrears.	
	Rs.	Rs.		
1884-85	16,30,557	15,05,898	7.65	Normal years.
1885-86	15,91,770	14,60,040	8.28	
1886-87	15,88,036	14,86,118	6.42	
1887-88	15,70,479	14,46,084	7.92	
1888-89	14,10,716	12,22,842	13.32	
1889-90	15,20,074	14,37,805	5.41	
1890-91	Figures doubtful.			
1891-92	14,19,029	13,31,047	6.20	Abnormal years.
1892-93	14,30,480	12,52,184	12.47	
1893-94	14,24,592	11,61,747	19.02	
1894-95	14,20,484	10,84,723	23.64	
1895-96	13,56,036	8,27,441	38.98	
1896-97	13,29,743	8,78,668	71.52	
1897-98	13,21,708	10,34,170	21.76	
1898-99	13,09,261	11,12,022	15.06	
1899-00	12,54,027	11,59,020	7.58	

The scale of arrears tallies fairly closely with the character of the seasons described in paragraph 3, and this correspondence is an argument in favour of their correctness. They may be divided into two periods—(1) from 1885 to 1892, and (2) from that year onward. The latter period was marked by the series of calamities

*Gram is sometimes found selling for three maunds the rupee, and Mr. Muir wrote 'gram is occasionally exported, but this can only happen when there is a scarcity in the Doab and the rise in price is sufficient to repay the expense of carriage.'

which, beginning with the hailstorm of 1892-93, culminated in the famine of 1897, the effect of which was so severely felt that it was not until 1899-1900 that the arrears again fell to their usual level. It was in fact so abnormal that no conclusion can be drawn from the figures relating to it; and the figures themselves are to a certain extent misleading as they include arrears for rent which had been remitted. The first period, however, may be considered as more nearly normal. It is true that the seasons were so far unfavourable that the settlement broke down in parts of the district, but the more important rabi harvest, from the proceeds of which the rent is mainly paid, seem to have been fair, and there were no serious calamities. Except in 1888-89, when there was a partial failure of the rabi in the kabar tracts, this period does not exhibit any very heavy arrears for a thinly populated district, and bears out my contention that in normal years the rental demand can be collected without any considerable shortage. I usually found that in any but the best parts of Oudh the proprietor must be prepared to put up with a loss of about 5 per cent. on account of short collections. In Jalaun, arrears are certainly higher, but, on the other hand, expenses are less. The peasant proprietor employs no agent to collect his rents, and as he rarely goes to law, his legal expenses—a considerable item on a large estate—are a negligible quantity. The tenant of Bundelkhand, whether high caste or low, cannot be accused of recusant tendencies—if somewhat indolent, he is docile and tractable, and pays up when he can. Moreover, as I have endeavoured to make clear in describing the general characteristics of the district, the profits of agriculture, though uncertain, are high, if the season is at all favourable, owing to the natural fertility of the soil and the small expenses of working it: the tenant can afford to lose part of his harvest and still be in a position to pay his rent. For instance, the partial failure of the kharif crop from 1884 to 1889 did not appear to weigh very heavily, outside particular tracts of Jalaun and Kalpi which largely rely on this harvest; and elsewhere collections were good. It is thus possible to allow a fairly wide latitude to the term “normal years,” which need not be taken as limited to favourable years, but to extend to years unmarked by any serious calamity. The last point to be mentioned is that the spread of irrigation cannot fail to improve collections, and its effect had already been very noticeable in a certain class of villages. In the Sikri estate, now under Court of Wards’ management, much of which has an indifferent type of kabar soil, there has been a considerable extension of irrigation since 1901, with the result that there has been a continuous fall of arrears. The average arrears for the past three years were 4·66 per cent.

Classes of tenure.

23. The proportion of land held in each class of tenure is as below :—

Tenure.		Holdings area.	Proportion to total holdings.
		Acres.	
Non-occupancy	...	225,916	38·73
Occupancy	...	164,336	28·17
Sir	...	1,23,927	21·24
Khudkasht	...	55,660	9·54
Grain-rented	...	9	...
Rent-free	...	13,552	2·32
Total	...	583,400	100·00

N. B.—The figures of revenue free plots the nominal revenue on which would be less than Rs. 10 and of specific plots and mahals belonging to Government are excluded.

The actually cultivated area held by proprietors was—sir 110,605 acres and 53,737 khudkasht, as compared with 123,049 and 76,496 at last settlement. There has thus been a fall of 35,153 acres, or 41 per cent. of the total fall in cultivation, due in part to the expropriation of the cultivating communities.

Gross assets.

24. I now take the gross assets of the district and show how each item has been dealt with. The assumption areas are assessed at the rates accepted for the valuation

of the land without deduction, and the nautor assumption areas at tenant's incidence.

Description.			Area.	Recorded rent or valuation.	Rate.	REMARKS.
			Acres.	Rs.		
Established Nautor. cultivation.	{ Cash-rented areas.	{ Non-occupancy ...	187,746	(a) 6,53,048	3.48	(a) Recorded rent.
		{ Occupancy ...	160,041	(a) 5,55,176	3.53	(b) Accepted valuation.
		{ Sir ...	104,736	(b) 3,86,267	3.69	(c) At tenant's incidence.
	{ Assumption areas.	{ Khudkasht ...	45,083	(b) 1,61,339	3.58	(d) At circle rates.
		{ Grain-rented ...	7	(d) 26	3.71	
		{ Rent-free ...	9,999	(d) 33,708	3.37	
	{ Cash-rented areas.	{ Non-occupancy ...	38,170	(a) 62,089	1.63	
		{ Occupancy ...	4,295	(a) 9,717	2.26	
		{ Assumption areas.	16,205	(c) 27,283	1.68	
	Total ...		566,282	18,98,653	3.36	
Addition for sayar ...		...	1,410			
Gross assets ...		...	19,00,063			

25. The following table exhibits the fallow in holdings which was excluded from assessment, and the deductions from the rental demand made on this account. The figures include both nautor and established cultivation:—

	Holdings area.	Cultivated area.	Fallow included in holdings area.	Percentage of fallow.	Recorded rent.	Cash rent.	Deducted for fallow.	Percentage of decrease.
		Acres.	Acres.		Rs.	Rs.	Rs.	
Non-occupancy ...	225,916	214,972	10,944	4.84	7,15,137	6,91,851	23,286	3.20
Occupancy ...	134,336	157,156	7,180	4.37	5,74,893	5,56,908	17,985	3.13
Total ...	390,252	372,128	18,124	4.64	12,90,030	12,48,759	41,271	3.20

N. B.—The figures of revenue free plots, the nominal revenue on which would be less than Rs. 10, and of specific plots and mahals belonging to Government are excluded.

Where a whole field had gone out of cultivation, its rent was deducted. Where the rents were paid in lump, or part of some of the enormous fields had gone out of cultivation, the fallow area was abstracted, and a reduction made in the rent proportionate to the percentage of fallow in the holding.

26. The following statement shows the additions to, and deductions from, the resultant rents, that is Rs. 6,91,851 non-occupancy and Rs. 5,56,908 occupancy.

	Established cultivation.					Nautor.			Total.		
	Recorded rent after deduction for fallow in holdings	Addition for concealed or unduly low rent and on account of application for enhancement.	Deductions to stable rent.	Accepted rent.	Difference + or - in recorded rents.	Recorded rent.	Accepted rent.	Difference.	Recorded rent.	Accepted rent.	Difference.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Non-occupancy...	6,23,782	5,217	11,948	6,23,031	-6,731	62,089	41,896	-20,194	69,851	6,64,926	-26,925
Occupancy ...	5,47,191	13,928	13,123	5,47,996	+805	9,717	7,269	-2,448	5,56,908	5,55,205	-1,643

N. B.—The figures of revenue free plots, the nominal revenue on which would be less than Rs. 10, and of specific plots and mahals belonging to Government are excluded.

The additions to the non-occupancy rents in established cultivation amount to Rs. 5,217 or .83 per cent. of the demand. They were made in the few villages where rents were palpably concealed, generally alluvial mahals, and in a certain number of mahals in which the rents were unaccountably low in the year of verification. The additions to the occupancy demand were heavier, as a sum of Rs. 4,077 was added to the valuation on account of enhancements actually decreed or

immediately claimable by the zamindars. The deductions to stable rents amount only to 1·90 per cent. of the non-occupancy and 2·40 per cent. of the occupancy demand. Looking to the large arrears of rent shown in the table set out in paragraph 22, the smallness of these deductions obviously calls for explanation. The amount of the deductions granted is really part of the larger question of the character of the assessment alluded to in paragraph 11. Had I been determining a rental income which could be realised over a series of years, taking good with bad, larger deductions would undoubtedly have been made. But the proprietors have been protected by special provisions against the losses which may fall on them from agricultural calamities and fluctuation of cultivation, and my settlement is not required to live through such critical periods unaided. I am called upon to fix only a fair rental demand which can be realised in ordinary seasons with no heavier losses than are incidental to estate management, and such I believe the accepted rental total to be. There are, too, special reasons for not making larger deductions. In the first place it must not be forgotten that a deduction of 3·20 per cent. from the demand has been made already on account of fallow in holdings. Again, the rents in certain class of villages were below normal in the year of survey; while in another large class, though rents were normal, yet there was a strong probability of an early rise. The former includes mahals just released from kurk tahsil; deteriorated mahals in which land is again coming under cultivation, and uninhabited or thinly populated villages in which, owing to the scarcity of non-resident tenants, land was letting at low rents. The latter class includes the large number of irrigated villages in which canal irrigation had not, up till the year of verification, had the effect of raising the rents. An examination of the rent rolls of 1311 fasli showed that in both classes of villages rents were going up, and it will probably ultimately be found that the rental demand of the year of survey formed a somewhat lenient basis of assessment.

The nautor rents stand on a different footing, and here the deductions are much heavier, amounting to 31·53 per cent. of the total. It has already been explained in paragraph 14 that in some villages there had been a marked improvement between the years of survey and inspection. As an assessment on the figures of the former year would not only have necessitated the continuance of a revenue which, by successive reductions, had become unduly light on the actual assets, but would have led to an overwhelming enhancement at the next quinquennial revision, it was decided in these villages to assess on the figures of 1311 fasli or 1312 fasli. But to graduate the enhancement so that part should be taken now and part at the next revision, and also to allow for a possible set back in the interval, the new cultivation was assessed at a low rate—usually the first year's nautor rate. This often resulted in a considerable disparity between the recorded and accepted rents.

Sfr and khud-
kasht.

27. Sfr and khudkasht in established cultivation were ordinarily assessed at circle rates, modified where necessary when the village was above or below average. More rarely, the tenant's incidence was applied. The total deductions amount to Rs. 93,478 or 17·07 per cent. of the valuation. Deductions for proprietary cultivation were made according to the circumstances of the proprietors. The low caste Kurmis and Ahirs, who are good agriculturists and do not necessarily employ hired labour, received as a rule a deduction of 15 per cent., unless the body was very numerous or poor, when a larger deduction was given. The Brahmans and Thakurs, whose expenses are greater and profits from agriculture less, ordinarily received an allowance of 20 per cent.: occasionally the maximum of 25 per cent. was given, if their poverty or numbers called for it.

The unrented nautor areas were ordinarily assessed at the same rate as the tenant's nautor without further deduction; but if the incidence happened to be high or unsuitable for the class of soil, they were assessed at a rate approximately half that prevailing on established cultivation. The all round rate on these areas works out to 1·01, or about one-third that at which sfr and khudkasht in established cultivation were assessed.

28. The rent-free area was valued in much the same manner as the sîr and khudkasht. Rent free grants for small areas are common in most parts of the district: they are often of long standing dating from Mahratta times, and suits for resumption might be of doubtful success. As the proprietors derive no profit from this land, it was assessed at something short of the full rate. Rent free areas.

29. The sayar income is derived from grass "runds" in the neighbourhood of the Betwa. These are often of considerable extent and the grass produced is of good quality; but there is not much market for it, and the income has been assessed at a moderate figure. Sayar.

30. As might be anticipated from the character of the seasons, the zamindars had little money to spend on improvements: a small sum has been allowed for construction of bandhs. Improvements.

31. The net assets of the district may now be stated.

Description.				Area ex- cluding fallow in holdings.	Accepted rent or valuation.	Rate.	Remarks.
				Acres.	Rs.		
Established cultivation.	{	Cash-rented areas ...	{ Non-occupancy ...	176,802	6,23,031	3.52	N.B.—The figures of revenue-free plots, the nominal revenue on which is less than Rs 10, and of specific plots and mahals belonging to Government are excluded.
			{ Occupancy ...	152,861	5,47,996	3.58	
	{	Assumption areas ...	{ Sir ...	104,736	3,20,323	3.06	
			{ Khudkasht ...	45,089	1,34,169	2.98	
			{ Grain-rented ...	7	24	3.43	
			{ Rent free ...	9,999	28,808 ⁷	2.88	
Nautor.	{	Cash-rented areas ...	{ Non-occupancy ...	38,170	41,895	1.09	
			{ Occupancy ...	4,295	7,269	1.69	
	{	Assumption areas	...	16,206	16,304	1.01	
Total				548,158	17,19,819	3.14	
Addi- tion for.	{	Land thrown out of cultivation ...		40	65	...	
		{ Sayar ...		...	1,410	...	
Deduction for improvement				...	330	...	
Net assets				...	17,20,984	...	

32. The resultant total is Rs. 17,20,984 on which a percentage of 47.76 and a revenue of Rs. 8,21,913 has been taken. The assessment of all parganas, except Jalaun (old portion), the figures of which are given subject to modification, have been reviewed by the Board.

Percentage of
revenue.

The percentage taken has been determined by considerations already set forth—the state of the assets in the year of survey, the probability of a rise in the rents of irrigated areas—the whole profit of which would go to the zamindars and would not be shared by Government at the quinquennial revisions—and above all by the provisions for remissions which, in effect, throw on Government the losses arising from bad seasons, and leave to the zamindars the extra profits of good. There did not appear to be any grounds for taking a particularly lenient percentage of the assets.

33. As the revenue system is complicated by a certain number of ubari mahals, half and two-third jama plots, apart from the revenue-free mahals, the details of the realisable and nominal revenue are stated below:—

Nominal and
actual revenue.

Realisable jama.				Nominal jama.			
Rs. a. p.				Rs. a. p.			
On full revenue paying mahals ...	8,02,895	0	0	On ubari mahals ...	1,874	0	0
„ ubari mahals ...	2,680	0	0	„ half jama mahals ...	610	0	0
„ half jama mahals ...	610	0	0	„ two-thirds jama-paying plots ...	66	8	0
„ two-thirds jama-paying plots ...	133	8	0	„ half jama-paying plots ...	1,152	0	0
„ half jama-paying plots ...	1,152	0	0	„ one-third jama-paying plots ...	14	0	0
„ one-third jama-paying plot ...	6	0	0	„ revenue-free mahals ...	2,130	0	0
				„ revenue-free plots the revenue of which is Rs. 10 or above ...	8,590	0	0
Total ...	8,07,476	8	0	Total ...	14,436	8	0

Former proposed
revenue.

34. To compare the new assessment with the preceding—

	Actual.			Nominal.			Total.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Former revenue	10,40,991	0	0	33,304	0	0	10,74,295	0	0
Revenue on the roll	9,74,459	15	0	17,956	15	0	9,92,416	14	0
Revenue after ... { Ordinary reductions ...	8,33,082	15	0	17,956	15	0	8,51,039	14	0
Special reductions ...	8,02,752	15	0	17,956	15	0	8,20,709	14	0
Proposed revenue	8,07,476	8	0	14,436	8	0	8,21,913	0	0

The former revenue is that assessed by Mr. White on the kanuni and pertali tracts in 1874 and 1886-87. The revenue on the roll is the revenue as it stood before the revision of 1901. The changes made in that year were subject to certain conditions, and, though they really amounted to reductions, were shown as suspensions. As this revision was based on the assets of 1900 and the years of verification of this settlement were the two following, there is naturally no great difference in the resultant revenue totals. But the divergence in individual villages was often considerable. The revenue on a certain class of good villages, where no difficulty of realisation had been experienced, was left unchanged at the reductions, but could not be maintained at a regular settlement conducted under present methods of assessment. Again, the assets had sometimes improved in the years following the reductions and the village could stand an enhancement. As I had not before me the mahalar distribution of the reduced revenue and was assessing the nautor on different principles, the resemblance between my revenue and the revenue after the reductions is more fortuitous than would appear at first sight.

Increase and decrease by parganas.

35. The increase and decrease by parganas as compared with the revenue at last settlement and that on the rolls is given below:—

Pargana.	Revenue of last settlement.			Revenue on the roll.						Proposed revenue.			Percentage of Variation to total revenue.								
	Actual.	Nominal	Total.	Actual.	Nominal.		Total.	Actual.	Nominal.		Total.	Of last settlement.	On the roll.								
	Rs.	Rs.	Rs.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.								
Orai ...	2,18,186	5,021	2,23,207	2,01,641	0	0	4,391	0	0	2,06,032	0	0	1,36,453	8	0	2,516	8	0	1,38,970	--37.74	--32.54
Kalpi ...	1,73,051	6,640	1,79,691	1,54,392	0	0	498	8	0	1,54,890	8	0	1,32,885	8	0	315	8	0	1,33,201	--25.87	--14.00
Koonch ...	3,18,803	9,709	3,28,512	3,06,841	0	0	7,921	14	0	3,14,762	14	0	2,67,466	8	0	8,130	8	0	2,75,597	--16.11	--12.44
Jalaun ...	3,30,951	11,934	3,42,885	3,11,585	15	0	5,145	9	0	3,16,731	8	0	2,70,671	0	0	3,474	0	0	2,74,145	--20.05	--13.45
Total ..	10,40,991	33,304	10,74,295	9,74,459	15	0	17,956	15	0	9,92,416	14	0	8,07,476	8	0	14,436	8	0	8,21,913	--23.49	--17.18

The difference is largest in pargana Orai where, as has been pointed out in paragraph 10, the revenue at last settlement was exceptionally heavy.

By tracts.

36. The increase and decrease by tracts is also appended—

Tract.	Revenue of last settlement.			Revenue on the roll.						Proposed revenue.						Percentage of variation to total revenue.	
	Actual.	Nominal.	Total.	Actual.		Nominal.		Total.		Actual.		Nominal.		Total.	Of last settlement.	On the roll.	
	Rs.	Rs.	Rs.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.	Rs.			
Parwa ...	1,18,845	1,433	1,20,278	1,08,800	7 0	779	1 0	1,09,579	8 0	1,08,101	8 0	791	8 0	1,08,893	—9.47	—63	
Mar-kabar ...	8,41,079	30,342	8,71,421	7,92,548	8 0	16,464	14 0	8,09,013	6 0	6,39,762	0 0	13,171	0 0	6,52,933	—25.07	—19.29	
Bakar ...	81,067	1,529	82,596	73,111	0 0	713	0 0	73,824	0 0	59,613	0 0	474	0 0	60,087	—27.25	—18.61	
Total ...	10,40,991	33,304	10,74,295	9,74,459	15 0	17,956	15 0	9,92,416	14 0	8,07,476	8 0	14,436	8 0	8,21,913	—23.49	—17.18	

These figures exhibit in a clear light the stability of the parwa as compared with other tracts.

37. The incidence of the new revenue is 1.50 per cultivated acre, as compared with 1.74 at Mr. White's settlement (kanuni and pertali combined). It is more instructive to compare the present incidence with that of Major Ternan's settlement of 1863 which, though made on rough and ready methods, proved most successful, lasting without revision for 20 years—a record in the history of settlements of this district. His assessment gave an incidence of 1.41 per cultivated acre, but being only on the pertali tract excluded the rich mar plain of Kooch. The present settlement, too, is made on a smaller and therefore *prima facie* more highly cultivated area, as the best lands remain longest in cultivation.

Incidence of new revenue per cultivated acre.

38. The distribution of the revenue between established cultivation and nautor, together with the rates is as follows:—

Distribution between established cultivation and nautor.

				Area.	Revenue.	Rate.
				Acres.	Rs	
Established cultivation ...	...	...	...	489,488	7,90,769	1.62
Nautor do. ...	...	...	...	58,670	81,144	.53
Total	...	...	...	548,158	8,21,913	1.50

N.B.—The figures of revenue-free plots, the nominal revenue on which would be less than Rs. 10 and of specified plots and mahals belonging to Government are excluded.

The incidence of the revenue on the nautor area is .53, and the incidence for future on established cultivation is Rs. 1.6-0, or a difference approximately of Re. 0-14-0. In the event, therefore, of the whole of the nautor maturing to established cultivation, the addition to the revenue, assuming a revision, would be Rs. 51,336. The all round incidence for future use on established cultivation falls short of the incidence on this cultivation by 8.67 per cent. This is partly the result of the exclusion of the gauhan area, and partly of the procedure followed in certain deteriorated villages, principally of parganas Kalpi and Orai. The deterioration had the effect of putting out of cultivation the inferior soils, such as the poorer kabar and parwa, while the better classes had remained under tillage. Any extension of cultivation must take place over the poorer land, which could not pay a revenue incidence founded on the all round rates of the better soils. It was necessary, therefore, to look into the class of the land which had fallen fallow since last settlement and might reasonably be expected to again come under cultivation, and to see to what extent the incidence would be modified by an addition of this area valued at circle rates. The incidence was tested by applying it to the area under cultivation at last settlement, and the resultant revenue compared with that of Major Ternan's and Mr. White's settlements, the former being accepted as the safest guide. If the 64,122 acres (revenue-paying) which have fallen fallow since last settlement should come under established cultivation, the present nautor area being assumed to be a more or less constant factor, they would give an addition of Rs. 88,168 to the revenue, or a total of Rs. 9,10,081. In the light of the experience of past settlements, such a revenue is as high as I should care to recommend in anticipation.

For the successful working of the rules relating to quinquennial revisions, it should be understood that there are certain lands incapable, owing to their poverty, of continuous cultivation, and habitually thrown fallow after a few years tillage. This resting of the soil must not be mistaken for intentional concealment of cultivation. It is not too much to say that any reports of the wilful throwing of rakar land out of cultivation may be safely disregarded.

39. The new system of fluctuating settlements has been on the whole well received. The great mass of the zamindars regard it at least with tolerance: relief in seasons of distress is from their point of view all important, and they profess themselves willing in return to pay a higher revenue when cultivation is full and

Fluctuating assessments.

their income larger. The wealthier proprietors candidly dislike it. They urge that the reductions mainly went to the poorer proprietors, and they have been holding their estates, if not at a loss, at any rate at a minimum profit during the past settlement, and should now be compensated by a moderate assessment based on low assets. They are apprehensive that Government will take advantage of a rise in rents as well as of cultivation, and dread inquisitorial examination into their rent rolls every five years. The objections are partly due to misunderstanding, and should disappear as the rules are seen in actual practice and their fears found to be groundless. Exceptional, that is, long-term settlements, under rules 20-21 have been sparingly granted, and such engagements have been made only with Babu Jagdish Parshad of Babai and the Thakurs of Perona—both well-to-do families—for so many of their villages as were eligible under the rules for this form of settlement.

Working of the settlement.

40. The Settlement Officer is required to state in his report how the settlement has worked in those parganas in which the new assessment has already come into force. This I am unable to do, as the only assessment which came in force in 1904-05 was that of pargana Orai ; but the season was so unfavourable that large remissions had to be made and a portion only was realised. In 1902 to 1904, the reduced revenue was collected without any balance of arrears, and it may be anticipated that the new revenue will be realised with equal ease in normal seasons. Judging from the fact that so far no appeals against the assessments have been filed, the zamindars should be well content with the new settlement. Its best prospect of success, however, lies not in its ready acceptance by the proprietors, but in the fact that its working will in future be an administrative matter, and that the demand will be moderated in seasons of distress and varied with the fluctuations of cultivation.

Cost of settlement.

41. The cost of the settlement up to date is shown below. I have no information regarding the expenditure on survey operations.

Head.	From 1st June 1902 to 30th September 1902.	From 1st October 1902 to 30th September 1903.	From 1st October 1903 to 30th September 1904.	From 1st October 1904 to 3rd October 1905.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Salary of gazetted officers ...	750 0 0	3,000 0 0	21,263 0 1	36,099 6 10	61,112 6 11
Pay of fixed establishment ...	...	1,737 13 1	7,183 3 0	11,408 14 7	20,329 14 8
Pay of temporary establishment...	...	4,347 0 4	10,085 15 9	13,994 8 8	28,427 8 9
Variable establishment ...	...	153 11 4	...	...	153 11 4
Allowances and contingencies ...	147 0 0	2,475 15 5	7,154 9 5	6,405 14 11	16,183 7 9
Total ...	897 0 0	11,714 8 2	45,686 12 3	67,908 13 0	1,26,207 1 5

The average to the square mile is Rs. 85.82. The total cost is not large, though the average to the square mile is somewhat high. The completion of the settlement in under two years, while materially lowering the total expenditure, necessitated the entertainment of rather a large staff. In this connection I may note that the arrangement of having the fairing of the attested records done by the patwaris increased rather than diminished the expenditure, as I was compelled, owing to the inaccuracy of their work, to maintain a large number of muharrirs to check it. With the same, or smaller staff of muharrirs, the first copy could have been fairied in a shorter time and in a far more presentable form: the second for their own use should be made by the patwaris themselves. As this would be a copy pure and simple made from a fairied out record, mistakes would hardly arise and a very slight checking would suffice. The system as laid down in the survey rules is in fact anomalous; the fairing of the khewats is so important that the Settlement Officer dare not leave it entirely to the patwaris; he is thus forced to employ almost as many trained muharrirs to supervise as would be required to do the whole fairing work themselves. Probably, the cheapest method would be to employ partly selected patwaris, paying them extra, and partly trained muharrirs.

42. The statistics of litigation are shown in the appendix. The only noticeable features are firstly, the small number of appeals from the decisions of the Deputy Collectors attesting the records, which may fairly be taken as a proof of good work ; and secondly, the unusual number of suits (144) for resumption of rent-free or revenue free grants under Chapter 10, Act II of 1901, which came before the Settlement Officer. The latter were of much complexity and took up a good deal more time than ordinary appeals. At least half related to what are known as malikana, or revenue-free rights, and were suits for declaring the holder liable to the payment of the revenue. It is the custom in this district for a zamindar in selling his share to reserve for his support a certain area free of revenue, the liability for the payment of which is assumed by the vendee : impoverished pattidars, and women unable to manage their property, some times hand over their shares on the same terms to wealthier members of the community. The clauses of the chapter dealing with rent-free grants are much clearer and more intelligible than those of the old Act, and the possibilities of a compromise by declaring the grantee an occupancy tenant or liable only for the revenue, greatly facilitate their working. But the provisions relating to revenue-free holdings are less explicit and in the absence of authoritative rulings on points of ambiguity, the cases are more difficult to decide. As many more will come up for hearing as soon as the settlement is over, I would suggest from my experience of their complexity, that they should be entrusted to a selected officer.

Litigation.

43. Under the Board's programme the settlement was to be finished in three years by a Settlement Officer working alone, or in two with the aid of an assistant. The latter course was adopted, but the completion of the settlement within that period made heavy demands on all concerned. Mr. Keane, whose work was characterised by great thoroughness and care, proved a valuable assistant and in my opinion is well qualified to conduct a settlement himself. Both Thakur Lekhraj Singh and S. Mohamed Ahsan deserve credit for good attestation work ; the latter has also carried out satisfactorily the distribution of the revenue. The office has not only worked under high pressure to get the figures ready in time for assessment and report, but have laboured under peculiar difficulties owing to inadequate accommodation, outbreaks of plague and fever. They have done their part of the settlement work well, and I hope their claims for employment in other settlements may be favourably considered. I would specially mention the services of Babu Jagat Narain, the head clerk, a capable and reliable man who has worked indefatigably, and of Babu Kalka Pershad, the second clerk.

Conclusion.

APPENDICES.



सत्यमेव जयते

APPENDIX I.—Comparative area statement for district Jalauu.

Period.	Total area.	Revenue-free.	Culturable		Cultivated.				
			Waste.	New fallow.	Irrigated—			Dry.	Total.
					From wells.	Other-wise.	Total.		
1	2	3	4	5	6	7	8	9	10
	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.
Last settlement ...	945,358	*12,796	110,794	29,857	6,428	11,845	18,273	588,784	607,057
Present settlement ...	941,162	†7,198	192,885	15,147	4,749	88,456	88,205	488,282	(a) 526,487

NOTE.—Revenue-free plots will be shown in a separate form and will not be entered in these statements except in column 3 above.

* Cultivated 11,858.

† Ditto 5,995.

‡ The figures for the alluvial mahals are of 1311 fasli and in the rest of district they are of survey year.

(a) Excludes 173 acres of Government property.

APPENDIX II.—Agricultural and census statistics for district Jalauu.

		Kharif.					Rabi.					Dofasli.		
		Juar.	Bajra.	Cot- ton.	Oil- seed.	Total.	Wheat and gram.	Gram.	Be- jhar.	Lin- seed.	Total.			
Masonry wells	Number of inhabited sites ...	*820												
Old—	1,196	Population of 1881 ...	†389,400											
New—	245	Population of 1891 ...	†362,390											
Total	1,441	Population of 1901 ...	†361,590	99,572	51,928	52,434	5,505	*214,746	155,453	117,605	23,533	16,545	*820,684	*2,872

* These figures are for the year of survey.

† Excluding feudatory states.

APPENDIX III.—Rent-rolls and collections for district Jalauu.

Year.		Holdings area.			Total	Total cultivated.	Rental demand (columns 2 and 3) and siwai.	Collections including arrears.
		Cash.	Grain-rented.	Assump-tion.				
1		2	3	4	5	6	7	8
							Rs.	Rs.
Last settlement	...	406,952	34	221,154	628,140	618,915	14,28,665	...
1298-99 F.	...	394,616	52	203,533	598,201	556,487	14,12,481	13,03,569
1299-00 F.	...	396,032	70	199,728	595,830	552,580	14,26,138	13,35,579
1300-01 F.	...	399,665	35	197,234	596,934	554,126	14,33,274	11,29,433
1301-02 F.	...	402,002	77	198,828	600,907	561,117	14,29,326	11,12,928
1302-03 F.	...	397,102	10	200,623	597,735	545,780	13,87,800	9,45,570
1303-04 F.	...	391,030	5	196,293	587,328	432,452	13,53,061	5,17,784
1304-05 F.	...	381,576	16	194,553	579,145	438,059	13,27,484	8,39,842
1305-06 F.	...	382,498	23	192,312	574,833	514,596	13,20,880	10,85,396
1306-07 F.	...	375,550	19	190,805	566,374	506,445	12,77,453	11,40,886
1307-08 F.	...	380,416	54	184,840	565,310	512,452	12,72,844	12,01,670
Total	...	3,003,487	361	1,958,749	5,862,597	5,174,094	1,86,40,741	1,06,12,607
Average	...	390,349	36	195,875	586,260	517,409	13,64,074	10,61,261
Year of verification	...	374,950	9	189,313	564,272	526,487	*12,57,283	...

Rs.

* Siwai... 11,963

Rent of kind area ... 27

11,990

APPENDIX IV.—Proprietors of district Jalaun.

Number of mahals.	Tenure	Number of co-sharers.	Cultivated area.	Total area.	Principal caste.	Cultivated area.	Total area.
			Acres.	Acres.		Acres.	Acres.
498	Single Zamindari ...	498	77,789	181,278	Thakur ...	154,108	284,683
838	Joint Zamindari ...	5,126	124,014	244,429	Brahman ...	152,623	265,076
276	Perfect Pattidari ...	2,460	51,061	86,694	Kurmi ...	77,928	103,788
647	Imperfect Pattidari ...	14,447	244,921	413,692	Gujar ...	51,668	78,960
98	Bhaiyachara ...	2,708	29,381	63,473	Lodhi ...	25,893	64,116
8	Government property ...	1	392	1,696	Kayasth ...	18,514	35,441
					Bania ...	16,678	30,211
					Ahr ...	9,977	28,946
					Musalman ...	11,349	24,159
					Khatttri ...	2,865	6,852
					Bairagi ...	3,727	5,905
					Kanwar ...	2,396	3,613
					Teli ...	1,399	1,898
					Gosbain ...	1,048	1,472
					Jat ...	1,129	1,451
					Rajput ...	503	1,001
					Kular ...	432	643
					Kewat ...	246	808
					Sunar ...	86	110
					Bhat ...	29	91
					Khangar ...	46	82
					Lohar ...	31	65
					Government property ...	392	1,696
2,855	Total ...	25,240	632,568	941,162	Total ..	6,32,568	941,162

APPENDIX V (a).—Assets and revenue of the Jalaun district but excluding the figures of revenue free plots, the nominal revenue on which is less than Rs. 10 and those of mahals and specific plots belonging to Government.

			Cash-rented.		Sir.	Khud- kasht.	Grain- rented.	Rent-free, &c.	Total.	
			Non- occupancy.	Occupancy and expro- prietary.						
1. Holdings area ... Acres.			225,916	164,336	123,927	55,660	9	13,552	588,400	
2. Recorded rent ... Rs.			7,15,137	5,74,893	...	...	...	...	12,90,030
3. Cultivated ... Acres.			214,972	157,156	110,605	53,787	9	11,629	648,158	
4. Cash rent of cultivated area Rs.			6,91,851	5,56,908	...	...	...	...	12,48,759
Established cultivation.	5. Soil with circle rates ...			...	...	...	...	...	...
	Gauhan ...			1,463	2,590	818	258	...	144	5,273
	Mar I ...			46,882	38,654	30,128	12,540	...	1,783	1,29,937
	Mar II ...			11,186	7,577	6,375	2,553	...	317	28,008
	Kabar I ...			44,827	31,630	24,770	11,435	6	2,585	1,15,253
	Kabar II ...			11,533	8,603	6,217	2,452	...	651	29,456
	Parwa I ...			30,109	37,152	22,805	8,164	1	2,412	1,00,643
	Parwa II ...			11,651	12,290	6,138	2,539	...	741	33,359
	Rakar moti ...			3,577	3,063	1,410	804	...	288	9,142
	Rakar patli ...			11,609	7,716	4,026	3,031	...	901	27,183
	Kachar I ...			2,910	2,286	1,406	886	...	103	7,691
	Kachar II ...			477	748	386	270	...	38	1,919
	Tir I ...			539	236	174	198	...	4	1,091
	Tir II ...			72	170	21	1	...	77	341
	Parwa Gauhani ...			67	146	62	13	...	5	292
6. Total area ... Acres.			176,802	152,861	104,736	45,083	7	9,999	489,488	
7. Valuation ... Rs.			6,29,761	5,67,164	3,85,333	1,61,328	26	33,670	17,77,272	
8. Incidence ...			3.56	3.71	3.68	3.58	3.71	3.37	3.63	
9. Accepted rent or valuation Rs.			6,23,031	5,47,996	3,86,267	1,61,339	24	28,808	17,47,465	
10. Incidence ...			3.52	3.58	3.69	3.58	3.43	2.88	3.57	
11. Nantor area ...			98,170	4,295	5,869	8,704	2	1,630	58,670	
12. Valuation ... Rs.			41,895	7,269	6,155	8,438	5	2,069	65,832	
Total of 9 and 12 ...									18,13,297	
Additions for—			Deductions for—							
1. Sayer ...			1,410	1. Proprietary cultivation ...			93,478			
2. Land thrown out of cultivation, &c. ...			65	2. Improvements ...			380			
Total+			1,475	3. Other reasons ...			...
			Total			98,808				
			Total minus			92,333				
			Net assets			17,20,964				
Incidence per acre of established cultivation 1.62			New jama at 47.76 per cent.			8,21,913				
Incidence per cultivated acre 1.50			Old jama			9,92,416.14 as.				
Incidence for future use Rs. 1 6 0 per acre of established cultivation.			Percentage of variation			—17.18				
" " " 0 10 0 " of nantor.										

N.B.—The figures of area and rental in appendix V will not correspond with those given in appendices I—IV because in the former they are partly for year of survey and partly of 1311 and 1312 fasli.

APPENDIX V(b).—Revenue of the Jalau district.

	Actual.	Nominal.	Total.	Remarks.
<i>Old revenues.</i>	Rs. a.	Rs. a.	Rs. a.	
Revenue on the roll	9,74,459 15	17,956 15	9,92,416 14	
„ after ordinary reductions	8,83,082 15	17,956 15	8,51,089 14	
„ „ special „	8,02,752 15	17,956 15	8,20,709 14	
<i>New revenues.</i>				
On full revenue paying mahals and plots... ..	8,02,895	...	8,02,895 0	* On established cultivation. Rs. 7,90,044
„ ubari mahals	2,680 0	1,874 0	4,554 0	On nautor cultivation... 31,144
„ ½ jama mahals	610 0	610 0	1,220 0	On sayar ... 695
„ ¼ jama-paying plots	133 8	66 8	200 0	On land thrown out of cultivation. 30
„ ½ jama-paying plots	1,152 0	1,152 0	2,304 0	
„ ¼ jama-paying plots	6 0	14 0	20 0	
„ revenue free mahals ... ..	...	2,180 0	2,180 0	
„ revenue free plots the revenue of which is Rs. 10 or above.	...	8,590 0	8,590 0	
Total	8,07,476 8	14,436 8	*8,21,913	

APPENDIX VI.—Statement showing proportion of each class of soils in the cultivated area of the Jalau district.

	Gau- han.	Mar.		Kabar.		Parwa.		Rakar.		Kachar.		Tir.		Total.
		I.	II.	I.	II.	I.	II.	Moti.	Patli.	I.	II.	I.	II.	
Area in acres (established and Nautor).	5,872	1,33,234	29,403	125,650	32,732	108,883	37,574	11,184	36,623	7,976	1,995	1,188	341	*5,32,655
Percentage to total cultivated area.	1.11	25.02	5.52	23.59	6.15	20.45	7.02	2.10	6.88	1.50	.87	.22	.07	100.

* In alluvial mahals the figures are of 1311 fasli and in the rest of district they are of survey year.

APPENDIX VII.—Case work return for the period commencing from 1st November 1903 to 9th October 1905.

	Deputy Collector's court work.		Assistant Settlement Officer's court work.		Settlement officer's court work.			
	Total No. of cases for disposal.	Total No. of cases disposed of.	Total No. of cases for disposal.	Total No. of cases disposed of.	Original case.		Appeals.	
					Total No. of cases for disposal.	Total No. of cases disposed of.	Total No. of cases for disposal.	Total No. of cases disposed of.
I.—Boundary dispute	29	29	1	1	2	2	1	1
II.—Distribution of assessment or redistribution of land and revenue.	597	555	...	...	2	2	5	5
III.—Cases arising out of the preparation of the record of rights.	(a) Proprietary right ...	1,506	1,506	...	55	55	22	22
	(b) Cultivating right ...	3,679	3,677	...	45	45	86	86
	(c) Rent-free tenure (chapter X II 1901).	...	...	...	144	144	...	...
	(d) Revenue-free tenure ...	47	47	...	1	1	...	...
IV.—Rent cases ...	(a) Determination of rent of excluded proprietors.	...	...	...	40	40	...	...
	(b) Enhancement of rent ...	...	...	385	303	303	5	5
	(c) Abatement of rent ...	...	...	2	7	7	1	1
V.—Miscellaneous	151	151	...	...	163	163	...	...
Total	6,009	5,965	388	388	762	762	120	120

Under the new rules the revenue will be adjusted every five years provided there has been a rise or fall of over 10 per cent. in the area of established cultivation, though intermediate revision may be applied for if the fall is one of over 15 per cent. The result is that the main duty of the settlement officer is to determine a revenue based on existing assets which will form a groundwork for such future adjustment as agricultural conditions may require. It has been found that with very few exceptions rents were not concealed, and that, allowing for reductions given on account of fallow which the tenant is unable to cultivate, the recorded rents were not much higher than could fairly be paid in normal years.

With an addition for the assumption areas the gross assets for the district were Rs. 19,00,063. Rupees 41,271 were deducted for fallow and Rs. 93,478 for proprietary cultivation; the net deductions from the recorded rents amounted to Rs. 28,568, and smaller deductions were made in respect of the assumption and rent-free areas. The net assets which emerged were Rs. 17,20,964, on which a revenue of Rs. 8,21,913 was taken, or 47.76 per cent. of the assets. Part of this was nominal, and the revenue realizable which remained was Rs. 8,07,476, a close approximation to the total of the previous revenue as it stood after the special reductions. The settlement officer estimates that, if in the future the area which has fallen fallow since the preceding settlement should come under permanent cultivation, this would give an addition of Rs. 88,168 to the revenue, raising it to Rs. 9,10,081.

3. As the Board observe, there is no district in the province the revenue administration of which in recent years has caused so much anxiety as Jalaun. In the future the grounds of anxiety should be lessened by the more liberal revenue policy and the more appropriate methods of assessment which have been adopted. One-fifth of the total cultivated area is now irrigated from the Betwa Canal, and with extended facilities the area protected from drought will increase.

On the other hand it is unquestionable that the district is not at the present time in a normal state. Owing to drought last year no crops were produced in many villages, and remissions of revenue amounted to over two-thirds of the revenue demand. Though famine conditions prevailed, yet with the favourable rains of the present season there is every hope of a rapid recovery. Still there are villages where, owing to the preponderance of fluctuating non-resident cultivation, the cultivated area on which the assessment has been based will probably not be reached this year. In such villages rule 23(b) of the special rules for settlement in Bundelkhand will apply and the assessment of the mahal will be subject to revision should the area under established cultivation be found to be less than the settlement area of established cultivation by more than 15 per cent. It is desirable that the new rules should come into force without delay, but in the existing state of the district relief which is otherwise admissible should not be refused merely because the landowners fail to apply for relief before the 1st December. The rules are not yet thoroughly known to and

understood by the people, and when the Collector finds that the cultivated area is much below the settlement accepted area he should take action himself this year under rule 23(b) even if no application be received by the 1st December.

4. With this proviso the Lieutenant Governor confirms the settlement for a period of thirty years subject to the intermediate revisions allowed by the rules. The assessment is fair and liberal to the revenue payers, and the Government recognizes the consideration, thoroughness, and ability with which Mr. Hailey has carried out the settlement operations.

ORDER.—Ordered that a copy of the above resolution be forwarded to the Secretary to the Board of Revenue, United Provinces, for the information of the Board.

By order &c.,

J. M. HOLMS,

Chief Secy. to Govt., United Provinces.



ORDERS OF GOVERNMENT.

No. $\frac{3377}{1-723-1904}$ OF 1906.

RESOLUTION.

REVENUE DEPARTMENT.

Dated Naini Tal, the 16th October 1906.

READ—

Letter from the Secretary to the Board of Revenue, United Provinces, no. $\frac{347}{1-216B}$, dated the 20th August 1906, submitting the final settlement report of the Jalaun district by Mr. H. R. C. Hailey, I.C.S., with a review thereof by the Board of Revenue.

OBSERVATIONS.—It is a hundred years since that part of the Jalaun district which comprised the parganas of Kunch and Kalpi came under British rule. The rest of the district was acquired at a considerably later date, and this is the first time that the district has been settled as a whole. The last settlement was carried out in the years 1885 to 1888. The assessment then made was based largely on rentals recorded after a time of comparative prosperity, though at the time of settlement the district was passing through one of those periodical depressions to which Bundelkhand is liable. In dealing with some parganas at any rate the settlement officer acted on the impression which he had formed that the shrinkage of the assets was due not so much to natural causes as to the desire of the proprietors to obtain a lenient assessment. The land revenue fixed, however suitable to a tract of ordinary conditions, proved too heavy for a district held by bodies of poor proprietors and subject to unusual agricultural vicissitudes. The depression continued: *kans* spread and land went steadily out of cultivation. The proprietors were forced to resort to money lenders, and alienations of land increased, over 36 per cent. of the total area changing hands between 1886 and 1902, a period in which, however, fell the famine of 1896-7. Reductions of revenue in certain villages from time to time became necessary. In 1896-7 a general revision by a special officer was made, and ultimately a further summary revision was carried out by the Collector of the district. At the time of re-settlement the total actual revenue of the district, which had been fixed at Rs. 10,40,991 at the previous settlement, had been reduced to Rs. 8,02,753.

2. The report now submitted furnishes an excellent description of the district and its past history, as well as a lucid account of the methods of the present assessment. Shortly before the district came under settlement the methods of assessment to be adopted in Bundelkhand came under consideration, and after a full and prolonged discussion the rules were evolved under which the recent operations have been conducted. The system of fluctuating assessment which has been adopted aims at periodically adjusting the revenue demand to the extent and character of the cultivation, a separate record being kept of land under established cultivation, and of *nautor*, or land recently brought under the plough from waste or prolonged fallow, which it is the custom to let at easy rates for the first three years after reclamation. Nearly 11 per cent. of the total cultivation was found to consist of *nautor*.